AN INVESTIGATION INTO PUBLIC AND PRIVATE ATTITUDES HELD TOWARD. . .

A. Alexanian, 1967

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CHAPTER I

INTRODUCTION

Since World War II, there has been an increasing commitment on the part of federal, state, and local agencies for the rehabilitation of physically disabled individuals. This effort has been directed toward the improvement of the skills and abilities required by the physically disabled individual to function effectively in society. The goal of these programs has been to eliminate, as well as to minimize, the adverse effects of physical disability. Unfortunately, a major barrier still confronts the physically disabled individual in his quest for full participation in all aspects of society.

Seidenfeld has succinctly stated the problem often facing the individual with a physical disability:

> No matter . . . how intensely we work to maintain the patient's courage and motivation, and no matter how successfully the capacity for socio-economic independence has been developed, the patient must frequently lose out, since his society is not prepared to accept him in terms of his assets.[1]

The attitudes and stereotypes held by society often culminate in social discrimination against the physically disabled. Although a physically disabled individual may be able to function effectively in a given role, he may be prevented from fulfilling that role. Barker summarized this

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[1] M. A. Seidenfeld, "Psychological Aspects of Poliomyelitis," Pediatrics, IV (1949), 317.

position when he said, "The underprivileged status of the physically disabled person is due, on the one hand, to his own physical defects and, on the other hand, to the negative attitudes of the normal majority with whom he must live."[1]

Prejudice may be expressed in a variety of ways and social settings. The restricting effects of prejudice may be felt by the physically disabled individual in his daily social contacts, school experiences, and employment opportunities; indeed, throughout his entire social existence. Some investigators have drawn analogies between the position of the physically disabled in America and the status of ethnic and racial minority groups.

Background of the Problem

Barker et al., in their review of research concerning attitudes held toward the handicapped, concluded that while public attitudes toward the handicapped are mildly favorable, a sizeable minority publicly express negative attitudes. Indirect evidence suggested that deeper unverbalized attitudes are frequently hostile.[2] After comparing different societies, Barker concluded that the physically handicapped individual in American culture is socially disadvantaged when compared with the

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[1]Roger Barker, "The Social Psychology of Physical Disability," Journal of Social Issues, IV, No. 4 (1948), 34.

[2]Roger G. Barker, Beatrice A. Wright, Lee Myerson, and Mollie R. Gonick, Adjustment to Physical Handicap and Illness: A Survey of the Social Psychology of Physique and Disability, Bulletin 55 (rev. ed.; New York: Social Science Research Council, 1953), p. 85.

handicapped in other cultures.[1] Hentig, in agreeing with Barker's observations, theorized that the presence of a physical disability causes the nonhandicapped majority group to socially isolate the physically handicapped minority group.[2] After reviewing studies that dealt with the attitudes of employers toward hiring physically handicapped job applicants, Rickard concluded: ". . . employers do not reveal their actual hiring practices when expressing their opinions publicly i.e., they tend to be more intolerant of the disabled in practice than in expressed opinions."[3]

When exploring social attitudes toward disabilities, investigators have customarily examined the reactions toward a particular type of disability. The brief background review to follow will focus on attitudes expressed toward cerebral palsied, blind, and stuttering groups.

Haring, Stern, and Cruickshank investigated the attitudes of regular classroom teachers toward the handicapped as compared with their attitudes toward typical children. Of the 44 teachers interviewed in two public schools, 60 per cent responded negatively to the interview question, "How would you react to the possibility of having a blind or crippled child in your class?"[4] Mussen and Barker, interviewing college

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[1]Barker, "The Social Psychology of Physical Disability," p. 34.

[2]Hans von Hentig, "Physical Disability, Mental Conflict and Social Crisis," Journal of Social Issues, IV, No. 4 (Fall, 1948), 27.

[3]Thomas Edwin Rickard, "Indices of Employer Prejudice: An Analysis of Psychological Aspects of Prejudice Toward the Disabled Worker," Ph.D. dissertation, University of Illinois (Ann Arbor, Michigan: University Microfilms, Inc., 1962), p. 30.

[4]Norris G. Haring, George G. Stern, and William M. Cruickshank, Attitudes of Educators Toward Exceptional Children (Syracuse: Syracuse University Press, 1958), p. 8.

students, utilized a self-rating scale to measure attitudes toward orthopedically handicapped individuals. Analysis of the data indicated that the subjects responded in a positive manner. The authors qualified this conclusion by stating, "This finding must be interpreted in the light of the fact that we dealt only with verbal expressions of attitude in a restricted cultural milieu."[1] Cruickshank and Raus believe that societal attitudes expressed toward the nonhandicapped child are more acceptant than attitudes expressed toward the cerebral palsied child. They theorized that the existence of a handicap causes society to react negatively and thus further isolates the cerebral palsied child.[2]

Barker et al. summarized research concerning blindness. They found attitudes toward the condition of blindness uniformly negative. Public attitudes held toward the blind are not generally unfavorable but covert attitudes are often perceived by the blind as hostile and derogatory.[3] Himes, a sociologist, stated that the blind population is endowed with certain culturally derived stereotypes. These cultural constructs consist of the "blind beggar," the "blind genius," and an almost universal belief in a "sixth sense ability." The author believes that these cultural stereotypes significantly affect the nature of interpersonal relationships involving the blind and the sighted. He summar-

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[1]Paul H. Mussen and Roger G. Barker, "Attitudes Towards Cripples," Journal of Abnormal and Social Psychology, XXXIX (1944), 355.

[2]William E. Cruickshank and George M. Raus, Cerebral Palsy: Its Individual and Community Problems (Syracuse: Syracuse University Press, 1955), p. 120.

[3]Barker, Wright, Myerson, and Gonick, op. cit., p. 288.

ized the effects by stating:

> One consequence of this process is the unrealistic, sometimes grotesque character of many social reactions to the blind. Another result is the routine subordination of blind persons and restriction of their behavior potentials with attendant injuries to morale, conception of self, and effectiveness of social roles.[1]

Gowman, in his book The War Blind in American Social Structure, reported on a group of eleven recently blinded World War II veterans. The author employed a semistructured interview lasting approximately one hour. A majority of the subjects expressed an awareness of their minority group status and voiced concerns about possible segregation by society.[2] Cowen, Underberg, and Verrillo constructed and administered a scale to measure attitudes toward the blind of those who worked with them. There were no differences in attitude as a function of previous contact with the blind.

> We find that contact or lack of contact with the blind does not relate significantly to verbalized attitudes to blindness. In fact, in the present study, though clearly not significant, there is a slightly higher mean score (more negative attitudes) reported by those who have had previous contact with the blind.[3]

The implications of such a finding could be very important, though lying beyond the main boundaries of this study. The authors investigated the hypothesis that the blind are perceived in the same way as racial and

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[1]Joseph H. Himes, "Some Concepts of Blindness in American Culture," Attitudes Toward Blindness, Social Research Series, Number 1 (New York: American Foundation for the Blind, 1951), p. 21.

[2]Alan G. Gowman, The War Blind in American Social Structure (New York: American Foundation for the Blind, 1957), p. 163.

[3]Emory L. Cowen, Rita P. Underberg, and Ronald T. Verrillo, "The Development and Testing of an Attitude to Blindness Scale," Journal of Social Psychology, XLVIII (1958), 300.

ethnic minority group members. They administered the California AM, AN, and F scales to the original sample.[1] Significant correlations between negative attitudes toward blindness and anti-minority, anti-Negro, and pro-authoritarian attitudes were found.[2] Chevigny and Braverman also reported finding strong parallels between the inferior social status of the blind and that of racial and ethnic minority groups.[3] Murphy, utilizing a self-administered rating scale, measured the attitudes of several groups of educators toward exceptional children. Categories covered included visually handicapped, slow learner, emotionally disturbed, physically handicapped, hearing impaired, gifted, speech impaired, and delinquent. The respondents were 100 elementary school principals, forty-six special educators (school guidance workers, nurses, and special class teachers), 100 freshman teachers-to-be, and thirty-one speech clinicians --a total of 309 participants. He drew the following conclusions about the visually handicapped:

> In comparison with other areas of exceptionality, children with visual defects are most rejected, being seen on an equal level attitudinally with overt-aggressive delinquents. In addition, it appears that there is a correlation between how much a person thinks he knows about a specific area of exceptionality and his feelings of acceptance or rejection about it. Most subjects not only placed the visually handicapped child on the rejection end of the continuum, but also indicated that

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[1] These materials are attitudinal scales in which the subject is asked to express the degree of his agreement or disagreement in relation to certain ideological belief systems: AM=Anti-Minority; AN=Anti-Negro; F=Authoritarianism. See the Authoritarian Personality.

[2] Cowen, Underberg, and Verrillo, op. cit., p. 303.

[3] Hector Chevigny and Sydell Braverman, The Adjustment of the Blind (New Haven: Yale University Press, 1950), p. 191.

they knew little about these children in comparison to those having other types of disabilities.[1]

Research concerning social attitudes toward the communicatively handicapped is relatively sparse. Wood and Carrow, employing sociometric choice-rejection techniques in the classroom, found that speech-handicapped children were less acceptable to their peers than nonhandicapped children.[2] McLatchy also utilized sociometric techniques to determine the social position of the stutterer in the regular classroom setting. Seven hundred and eight children in twenty-seven classrooms were studied. Nineteen of thirty stutterers involved in the study were in the lowest quartile. Seven of the thirty stutterers scored in the second quartile. Four of the thirty stutterers were placed in the fourth quartile. Thirteen of the thirty stutterers fell into the lowest percentile.[3] These findings suggest that the stuttering child is customarily relegated to a lower status by his peers.

The data reviewed suggest an alternative hypothesis. It may be that the lower status attributed to handicapped groups by the majority, nonhandicapped group represents findings that measure a true difference between abilities of the handicapped and nonhandicapped. This conclusion depends on the uncritical acceptance of three related assumptions:

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[1]Albert T. Murphy, "Attitudes of Educators Toward the Visually Handicapped," Sight Saving Review, XXX, No. 3 (Fall, 1960), 160.

[2]Sister Frances Jerome Woods and Sister Mary Arthur Carrow, "The Choice Rejection Status of Speech-Defective Children," Journal of Exceptional Children, XXV (February, 1959), 279-283.

[3]Mary Rita McLatchy, "A Sociometric Study of Thirty Stutterers in Regular Classroom Situations" (unpublished Master's thesis, Boston University School of Education, 1958), p. 2.

1. Handicapped groups are homogeneous.
2. Handicapped groups vary significantly on several important dimensions when compared to the nonhandicapped majority groups.
3. The presence of physical disability is invariably associated with, and responsible for, lowered abilities and self-esteem on the part of handicapped individuals.

Handicapped groups are extremely heterogeneous. For example, differences exist in degree of severity and obviousness of handicap, to mention two dimensions of extreme variability. Furthermore, handicapped and nonhandicapped groups share many relevant group characteristics in common. There appears to be little evidence to support the position of treating handicapped groups as significantly different groups when compared to the nonhandicapped. Societal beliefs imply that the presence of a physical disability is invariably associated with lowered abilities and self-esteem. This belief is not supported by research. Wright's discussion concerning the beliefs that are held concerning the relationship between atypical physique and self-esteem is pertinent to this discussion.

> Our position must be clarified on one point. It does not assert that physical disability plays no role at all in the development of inferiority feelings or other problems. It does imply, however, that the objective fact of disability is an extraordinarily poor criterion for judging which individual is unduly beset by self-abnegation and which individual is not, and that the common association between inferiority feelings and atypical physique, is a gross oversimplification unwarranted by the facts.[1]

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[1]Beatrice Wright, Physical Disability--A Psychological Approach (New York: Harper & Brothers, 1960), p. 55.

In this investigation negative attitudes held toward the handicapped are viewed as representing perceptions based on prejudicial belief-systems. This position will be examined extensively in the review of literature.

To summarize briefly, a small amount of exploratory research indicates that the blind, cerebral palsied, and stutterer populations tend to be subjected to adverse social attitudes by the majority of nonhandicapped society. Furthermore, evidence to date offers tentative support for the notion that the status of the handicapped in our society is similar to the status of racial and ethnic minorities in the American society. These negative social attitudes make psychological and social well-being an increasingly difficult goal for handicapped individuals to attain. Thus, frustration and conflict result from rehabilitation efforts directed solely toward the handicapped individual without consideration of community attitudes.

Statement of the Problem

The main purpose of this investigation is twofold: first, to develop an instrument to measure overt (public) and covert (private) attitudes toward the blind, cerebral palsied, and stutterer populations; second, to utilize this measure to examine a prominent socio-psychological notion that the social status of the handicapped is similar to the status of racial and ethnic minorities in the American society. The specific purposes of the investigation can be stated as follows:

a. To construct a paired, direct-projective sentence-completion test which will measure public (overt) and private (covert)

attitudes of selected groups of subjects toward cerebral palsied, blind, and stutterer populations.

b. To examine the relationships that exist between direct and projective sentence-completion responses.

c. To analyze the relationships between covert and overt attitudes toward the handicapped in relation to attitudes held toward racial and ethnic minority groups.

d. To evaluate and analyze any possible differences in attitudes that are expressed toward each of the categories of disabilities under study.

e. To analyze and discuss the relationships of the following variables: social status as related to occupation, sex, age, and self-esteem.

The main hypothesis states that there will be systematic differences between public (overt) and private (covert) responses to matched, direct and projective questionnaires that deal with socially conflicted objects of inquiry, i.e., an object of social inquiry for which there is a normative social expectation of "right" and "wrong" responses, but the expectation has not been satisfactorily internalized by large sections of the population. The areas to be examined include attitudes toward self-worth, the Negro, and the handicapped. The basic hypothesis states that a substantial number of individuals hold private attitudes about these topics that are in sharp contrast to their public pronouncements on the same topics. By varying the situational demands of the testing environment, it should be possible to elicit responses that are indicative of the subject's public and private attitude-systems.

Definition of Terms

For purposes of this investigation, the following definitions have been utilized:

a. Attitude: "Attitudes" have been defined as the degree of positive or negative feeling associated with the groups being investigated as measured by the instruments employed in this inquiry.

b. Physical Disability: "Physical disability" has been defined as a condition of impairment having an objective aspect usually determined by a physician. Terms which are employed synonymously with physical disability are "handicap" and "defect."

c. Blind: The legal definition of "blind" will be used, i.e., a measured visual acuity of 20/200 or less in the better eye with maximum correction, or having a field of vision restricted to an arc of 20' or less.

d. Cerebral Palsied: "Cerebral palsy" has been defined as neuromuscular disabilities characterized by paralysis, incoordination, or weakness, caused by damage to cortical and subcortical tissues and often accompanied by sensory, intellectual, and other deviations.

e. Stuttering: "Stuttering" has been defined as a speech disorder characterized by hesitations, repetitions, and/or blocking during communicative efforts.

f. Private Attitudes: The term "private attitudes" refers to the internal attitudes that an individual maintains toward a social object. Synonymous terms to be employed in this study are "covert attitude," "latent attitude," "personal attitude," and "personal hypothesis."

g. Public Attitudes: The term "public attitudes" denotes the expressed attitudes that an individual maintains toward a social object. Synonymous terms to be employed in this study are "overt attitude," "manifest attitude," "direct attitude," and "expressed reaction."

h. Social Prejudice: "Social prejudice" is defined as an adverse or negative attitude toward a group of people in society, based on preconceived judgments about individuals without just grounds or sufficient knowledge of the facts.

i. Self-worth: "Self-worth" has been defined as the degree of positive or negative acceptance of one's personal qualities and traits as measured by the instrument used in this study. A synonymous term to be employed is "personal competence."

j. Socio-economic Status: "Socio-economic status" has been defined as upper, middle, and lower social classes as identified by rankings of parental occupation in accordance with Warner's system of ranking occupations.[1]

k. Socially Conflicted Object of Inquiry: A "socially conflicted

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[1]Lloyd W. Warner, Marcia Meeker, and Kenneth Eells, Social Class in America (New York: Science Research Associates, Inc., 1949), pp. 140-141.

object of inquiry" is one for which there is a normative social expectation of "right" and "wrong" responses, but the expectation has not been satisfactorily internalized by large sections of the population. For example, the Negro is a socially conflicted object of inquiry. Individuals are aware that they are expected to have an attitude which they may not actually have. In this investigation the blind, cerebral palsied, and stuttering populations are assumed to be socially conflicted objects of inquiry.

1. Socially Neutral Object of Inquiry: A "socially neutral object of inquiry" is one for which there is no normative social expectation of "right" and "wrong" responses. For example, the preference for one of two colors is ordinarily a socially neutral object of inquiry.

Justification of Need for the Study

Findings up to this point are highly suggestive but still inconclusive regarding the proposition that society reacts with prejudicial feelings toward handicapped groups. Also, much of the evidence to date consists of the personal opinions of investigators rather than findings derived from research-oriented inquiries. The evidence implies that there are similarities between the psychosocial status of the racial and ethnic minority group member and that of the sensorily, physically, and communicatively disabled individual. At present, this implied similarity is in need of further study.

The development of a paired, direct-projective questionnaire should prove to be a valuable tool for relating external, public attitudes with internal, private attitudes for the purpose of studying the interrelationship between these hypothesized levels of attitudinal functioning.

Direct assistance to the handicapped is one way to aid in their rehabilitation. If the handicapped individual feels socially rejected, then efforts should be focused on investigating and analyzing the dimensions of those feelings. If our rehabilitative efforts are going to accomplish their desired goals, it is imperative to explore the influences of the social milieu upon the handicapped. Since handicapped persons grow up in a social context of physically normal individuals, it becomes crucial to explore the social meanings that nonhandicapped persons attach to various physical disabilities as well as to physically handicapped individuals. Indeed, the presence of adverse, rejecting sentiments may be instrumental in creating psychological maladjustment for the individual with a handicap. Myerson states the problem succinctly: "The problem of maladjustment to physical disability is as much or more of a problem of the nonhandicapped majority as it is of the disabled minority."[1]

The following chapter will provide an extensive review of findings concerning attitudes toward the handicapped.

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[1]Lee Myerson, "Physical Disability as a Social Psychological Problem," Journal of Social Issues, IV, No. 4 (Fall, 1948), 9.

CHAPTER II

REVIEW OF LITERATURE

Background

Numerous investigators have compared the social position of the physically disabled to that of ethnic and racial minority groups. Barker, Hentig, Tenny, Wright, Linde, and Berreman[1] support the notion that the physically handicapped group member shares basic characteristics with members of ethnic and racial minority groups. This idea has been conceptualized as an underprivileged socio-economic position for all disabled groups and is analogous to the undervalued social position often experienced by ethnic and racial minority groups. As Gordon Allport has stated, "One of the facts of which we are most certain is that people who reject one out-group will tend to reject other out-groups. If a person is anti-Jewish, he is likely to be anti-Catholic, anti-Negro, anti any

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[1]Roger G. Barker, "The Social Psychology of Physical Disability," Journal of Social Issues, IV, No. 4 (1948), 34; Hans von Hentig, "Physical Disability, Mental Conflict and Social Crisis," Journal of Social Issues, IV, No. 4 (1948), 27; John W. Tenny, "The Minority Status of the Handicapped," Journal of Exceptional Children, XIX (April, 1953), 262; Beatrice Wright, Physical Disability--A Psychological Approach (New York: Harper & Brothers, Publishers, 1960), p. 16; Thomas Linde, "Accent on Assets: Two Problems in Psychology and Cerebral Palsy," Cerebral Palsy Review, XXIII, No. 6 (November-December, 1962), 11; Joel Van Meter Berreman, "Some Implications of Research in the Social Psychology of Physical Disability," Journal of Exceptional Children, XX (May, 1954), 350.

out-group."[1] Adorno et al., in agreement with Allport, stated, "Evidence from the present study confirms what has often been indicated: that a man who is hostile toward one minority group is very likely to be hostile against a wide variety of others."[2] This proposition will be explored extensively in this section.

Wright discussed the similarities between handicapped groups and ethnic and racial minority groups and cited such commonalities as employment discrimination, especially at higher levels; restrictions in social and recreational activities; insistence of majority group members that the minority group members feel and act like less fortunate beings; and the subjection of persons with disabilities to devaluating stereotypes. However, the author stated that handicapped groups and ethnic and racial minority groups are not alike in all respects. Usually members of handicapped groups do not receive group sanction that motivates them to engage in behavior highlighting their disability. In most instances, the handicapped individual is encouraged to appear as much like a non-disabled person as possible. Conversely, members of racial and ethnic minority groups are supported by their groups to strive for goals that are unique to their group.[3]

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[1]Gordon Allport, The Nature of Prejudice (Reading, Mass.: Addison Wesley Publishing Co., Inc., 1954), p. 66.

[2]T. W. Adorno, E. Frenkel-Brunswick, D. J. Levinson, and R. N. Sanford in collaboration with Betty Aron, Marcia Hertz Levinson, and William Morrow, The Authoritarian Personality (New York: Harper & Brothers, 1950), p. 9.

[3]Wright, op. cit., p. 6.

Berreman, a sociologist, believes that physically handicapped children often are rejected by their peers. These negative stereotypes frequently lead to self-devaluating feelings. This pattern of discrimination may continue into adulthood, culminating in the same stigmatizing stereotypes that ethnic and racial minority groups encounter from segments of the majority society.[1]

Hentig postulated that the presence of a physical disability is instrumental in creating social and psychological distance for the handicapped individual. The author commented that a minority of the handicapped are able to bridge successfully the separation between themselves and society. He continued:

> Others go in quest of groups in which a common wrong inflicted by nature or man, has abolished social distance. . . . If this is the way that not a few disabled persons solve the problem of social distance--psychologically successful, sociologically less effective--should this not be a lesson teaching us how to restore the attractive power of our group and to minimize the social crisis of the disabled.[2]

Tenny agrees with Hentig that society imposes stringent social sanctions that result in an underprivileged, minority group status for the handicapped person. He noted seven similarities and differences between handicapped groups and ethnic minority groups:

1. A handicap like other differences tends to produce social distance.

2. The handicapped, like other minorities, are often unfavorably portrayed in literature, in drama, and in slapstick humor.

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[1]Berreman, op. cit., p. 356.

[2]Hentig, op. cit., p. 26.

3. The handicapped group, like the Negro and other racial groups, is frequently faced with segregation, particularly in schools.

4. Like other minorities the handicapped are at a vocational disadvantage over and above that involved in the nature of their disability.

5. Unlike other minority groups, the minority status of the handicapped child is different from his status as an adult. As a child he might have been overly protected by his parents and society. As an adult he may be faced with the harsh reality of competition complicated by discrimination.

6. Usually the family and neighbors do not share the minority status of the handicapped child.

7. The handicapped are not alike in their minority status. Differences exist in the kinds of handicaps, degree of severity, and the obviousness of the disability.[1]

Jordan examined the question of whether it is valid to place handicapped groups in the same conceptual framework as ethnic and racial minority groups. He suggested that there were sufficient reasons for examining disabled groups employing separate concepts from those customarily applied to minority groups.[2] The term disadvantaged group was utilized by the author to mean ". . . that group composed of individuals marked in their social-cultural affiliations, socio-economic, or professional trade activities, because of a particular, discernible physiological defect."[3] He stated that the presence of a disability is the shared commonality of the disadvantaged group that influences the psychological and social orientation of its members and is the means by

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[1]Tenny, op. cit., p. 262.

[2]S. Jordan, "The Disadvantaged Group: A Concept Applicable to the Handicapped," Journal of Psychology, LV (1963), 313-322.

[3]Ibid.

which they are identified. He enumerated five differences:

1. The disadvantaged group is not self-perpetuating from generation to generation as a racial or ethnic group is.

2. Adverse social reactions are to the handicap and not the individual.

3. Although there is social distance between the disadvantaged and non-disabled, its meaning is not the same as ethnic and social minority group isolation from the majority society.

4. Outside help is sanctioned toward the disadvantaged, while negative behaviors are discouraged. In comparison, the overt expression of negative attitudes toward members of a minority group is socially accepted by members of various groups within the majority.

5. The minority group is perceived as a "group in transition." The emphasis is constant favoring assimilation. Disadvantaged groups are not being influenced in the direction of assimilation. Most often a "social limbo" is the result.[1]

Summary

A majority of the investigators support the notion that the physically handicapped share basic commonalities with ethnic and racial minority groups. They agree that the common bond among the groups is an underprivileged social position. The differences that exist, as noted by Jordan, appear to represent differences that are nonsignificant factors in the sociological life-space of the handicapped. Yet the question remains: Do majority group members react to handicapped group members on a metaphorical-historical basis analogous to interactions between ethnic minority groups and the majority group? The statements of most investigators support the viewpoint that this is indeed the situa-

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[1] Ibid.

tion facing the handicapped group member. A variety of other studies that directly or indirectly deal with this issue will be reviewed.

Cross-Cultural Investigations

Comparisons between different societies and cultures have disclosed a marked variability in attitudes toward physical disabilities. Hanks and Hanks theorized that the social position of the handicapped is crucially affected by the socio-economic structure of the particular society. They enumerated five categories in which the handicapped have been placed in various societies: pariah, economic liability, tolerant utilization, limited participation, and laissez-faire. The authors advanced the thesis that protection and social participation for the physically handicapped are increased in societies where (1) the level of productivity is higher in proportion to the population and its distribution is more nearly equal; (2) competitive factors in individual or group achievement are minimized; and (3) the criteria for achievement are less formally absolute, as in hierarchical social structures, and more weighted with concern for individual capacity, as in democratically structured societies.[1]

Jaques collected data concerning the treatment of the disabled in twenty-seven primitive cultures. He reported that a larger percentage of handicapped individuals received protection in societies that depended upon agricultural production rather than on hunting or fishing.

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[1] J. R. Hanks and L. M. Hanks, "The Physically Handicapped in Certain Non-Occidental Societies," Journal of Social Issues, IV (1948), 11-20.

The author also observed that better treatment of the disabled appeared to correlate positively with permanent patterns of residence rather than with transient patterns of residence.[1]

Myerson also summarized findings about the psychosocial position of the handicapped in different societies. He discovered no consistent trends cross-culturally. Indeed, when different cultures were compared, wide differences in attitudes toward physical disability were observed. The author asserted that much of the behavior considered typical of the disabled is not a function of the person but rather a function of the situation. In American culture, for example, physical disability is psychosocially negative. This negative social situation is largely determined by the highly negative values assigned to certain atypical physiques in American culture. Since the author believes that negative attitudes toward disability are predominantly a social phenomenon, his recommendations lie in the province of social planning and action:

1. Reduction of underprivileged social position, e.g., providing specific employment rights for adults and preventing segregation of children.

2. Reduction of marginality, e.g., by defining the limits of freedom and clarifying the boundaries between what is possible and what is not possible.

3. Changing the meaning and value of atypical physique, e.g., from "Not as good" to "different"; from physique as the self to physique as a tool to be used by the self.

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[1]Marceline Jaques, "Treatment of the Disabled in Primitive Cultures," Readings in Rehabilitation Counseling (Champaign, Ill.: Stripes Publishing Company, 1960).

4. Specific clinical techniques include participation in deeper relationships where the disabled person can be known as a person, counseling, exposure to success experiences, opportunity for the release of negative feelings as well as opportunities for subliminated forms of behavior, and the development of realistic life goals. With children, democratically oriented schools, full social participation with peers, and well adjusted parents are all positive influences for the physically disabled.[1]

Fielding, Kessler, and Laycock, in separate studies, commented on the social status of the handicapped in American culture. Both Fielding and Laycock strongly recommended that rehabilitative efforts should focus on improving community attitudes toward the physically handicapped, as well as on providing rehabilitative services. Kessler asserted that the historical attitude toward the crippled and disabled in the United States has been characterized by an attitude of charity. However, this attitude of charity has frequently been utilized to place the handicapped individual in an undervalued social position.[2,3,4]

Summary

Although additional research is needed in this area, some tentative conclusions seem warranted: (1) social-historical factors appear

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[1]Lee Myerson, "Physical Disability as a Social Psychological Problem," Journal of Social Issues, IV, No. 4 (Fall, 1948), 2-10.

[2]Benjamin B. Fielding, "The Rehabilitation Process and the Status of the Disabled in the Community," Journal of Exceptional Children, XIX (1953), 228.

[3]Henry H. Kessler, Rehabilitation of the Physically Handicapped (New York: Columbia University Press, 1947)

[4]S. R. Laycock, "Community Understanding of the Exceptional Child," Journal of Exceptional Children, XXI (1954), 47-49.

to be important variables in determining attitudes toward the disabled; (2) societies vary markedly in their social attitudes toward the disabled; and (3) the socio-economic organization of a society appears to be an important component influencing the social position of the handicapped in a particular society.

Studies of Attitudes of School-Age Children

Investigations have frequently relied upon sociometry[1] to assess the attitudes of school-age children. Wood and Carrow explored the social desirability of speech-handicapped school children by comparing the choice-rejection score of ninety-six communicatively handicapped children with 1,428 normal-speaking peers in grades 2, 3, 4, and 5. The speech-handicapped group demonstrated significantly lower choice-rejection scores in the categories of play and friendship. Between the groups, differences in the category of choice of work-mate were not significant. The authors interpreted the findings as lending support to the hypothesis that the child with a speech defect tends to be less acceptable to his peers than the non-speech-handicapped child.[2]

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[1]". . . a sociometric measure is a means of assessing the attractions, or attractions and repulsions within a given group. It usually involves each member of the group privately specifying a number of other persons in the group with whom he would like to engage in some particular activity and, further, a number of persons with whom he would not like to participate in the activity." Gardner Lindzey (ed.), Theory and Method, Vol. I, Handbook of Social Psychology (Reading, Mass.: Addison-Wesley Publishing Company, Inc.,

[2]Sister Frances Jerome Woods and Sister Mary Arthur Carrow, "The Choice-Rejection Status of Speech-Defective Children," Journal of Exceptional Children, XXVI (February, 1959), 279-283.

Perrin also employed sociometric techniques to investigate the social position of the speech handicapped in the regular classroom. A total of 455 children in grades 1 through 6 were asked the following three questions: (1) What three children would you like best to play with? (2) What three children would you like best to work with? and (3) What three children would you like best to sit next to you? Results indicated that there were significantly more isolates among the speech handicapped group than among the non-speech handicapped group.[1]

Freeman and Sonnega also utilized sociometric techniques to examine the peer-status of children enrolled in speech therapy programs. They evaluated three third grade and two fourth grade classes containing 133 subjects. Of the total group, twenty-six subjects were receiving speech therapy services. Subjects were asked to choose their best friends, best speakers, and most socially desirable class members. Correlations were computed between scores on each of the dimensions for the speech therapy group, the non-speech therapy group, and the total group. The authors' results are in disagreement with the previously reported findings of Wood, Carrow, and Perrin. Although the results indicate that children who attend speech correction classes are chosen less often by their peers when the basis of selection is speaking ability, the data did not support the hypothesis that children who attended speech therapy classes were chosen less frequently than their non-speech handicapped peers when the basis for selection was friendship. The authors also re-

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[1]Elinor Horwitz Perrin, "The Social Position of the Speech Defective Child," Journal of Speech and Hearing Disorders, XIX (January, 1954), 250-252.

ported there were no significant differences between speech-handicapped and non-speech-handicapped children in the realm of social desirability.[1]

In a recent study, Marge investigated the social status of third-grade, speech-handicapped children as determined by the attitudes of peers, teachers, and parents. Subjects were selected from a school system which did not have a speech therapy program. The initial subject pool consisted of 101 males and 96 females. Subjects had a mean age of 8 years, 10 months, and were distributed in eight classrooms. Intelligence level was judged to be normal or above for all subjects. The entire sample received a diagnostic speech survey. Thirty-six of the subjects were diagnosed as having a speech disorder of moderate to severe intensity. A control group of 36 subjects was selected randomly from the remaining subject pool. Sociograms were administered to the classroom teacher and then to the children in each third-grade classroom. Both sociograms focused on the dimensions of intellectual ability, physical prowess, social desirability, and general speaking ability. Parents of both groups of children were sent a parental attitude form, which included questions about attitudes toward handicapping conditions as well as toward handicapped individuals. Analysis of the teachers' and the children's sociometric forms indicated that there was a trend for the speech-handicapped child to be held in a lower social position than the normal-speaking child in selected, interpersonal relationships. In areas of study, work activity, and desirability as a dinner guest, the speech-

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[1]Gerald G. Freeman and James R. Sonnega, "Peer Evaluation of Children in Speech Correction Class," Journal of Speech and Hearing Disorders, XXI (January, 1956), 179-182.

handicapped child had significantly lower social position when compared to his normal-speaking peers. On the other hand, no significant differences between the two groups were demonstrated in areas of playground activity and general speaking ability. This finding is directly opposed to Freeman and Sonnega's contention that speech-handicapped children are chosen less often by their classmates when the basis of choice is speaking ability. Analysis of data from the parental attitude form indicated no significant differences in attitudes between the two parent groups. The parents of speech-handicapped children, however, appeared to attach more importance to good speech habits than did the parents of non-speech-handicapped children. In comparing speech disabilities to other kinds of disorders (amputee, cerebral palsied, epileptic), the author discovered that the total parent group perceived speech disorders as less handicapping than other types of disabling conditions.[1]

Billings and Force, in separate studies, employed sociometric techniques to assess the social status of the physically handicapped child in the regular classroom. Billings explored the attitudes of non-crippled children toward crippled children in three elementary schools, obtaining subjects from grades 1, 3, and 6. Assessment techniques included projective instruments. The subjects were presented a series of pictures focusing on peer relationships and were instructed to tell a story. The examiner presented the stimulus a second time but referred to a figure in the test card as a "cripple." Subjects were also instructed

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[1]Dorothy Kunsevilch Marge, "The Social Status of Speech-Handicapped Children," Journal of Speech and Hearing Research, IX, No. 2 (June, 1966), 165-177.

to complete three incomplete sentences containing content dealing with the crippled figure. Findings indicated that the non-handicapped child held unfavorable attitudes toward his handicapped peers. The oldest group (11.8 years) was significantly more unfavorable in their attitudes than the youngest group (6.5 years). The children who rated highest in adjustment by their teachers exhibited the most unfavorable attitude scores toward the handicapped. The author interpreted his findings as offering support for the notion that physically handicapped groups are perceived in the same light as racial and ethnic minority groups.[1]

Force came to substantially the same conclusions as Billings. He employed a sociometric instrument to measure the social status of physically handicapped children, including friends, playmates, and workmates. Three hundred and sixty-one normal children and sixty-three physically handicapped children in fourteen elementary school classrooms from three Michigan schools were tested. Intelligence level of the physically handicapped subjects was within the normal range. Age range included children in grades 1 through 6. Categories of disabilities included orthopedically handicapped, visually handicapped, and hearing handicapped. The test data were derived from situations in which the physically handicapped and non-handicapped child were being educated together. The cerebral palsied subjects received the lowest number of choices when compared to other disability groupings. The author interpreted the results as offering support for the hypothesis

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[1]H. K. Billings, "Exploratory Study of the Attitudes of Non-Crippled Children Toward Crippled Children in Three Selected Elementary Schools," Journal of Exceptional Children, XXXI (Summer, 1963), 381-387.

that the presence of physical disability contributes significantly to early and continuous minority group identification.[1]

Szuhay also studied the attitudes of elementary school children. His total sample included 288 participants, consisting of 144 children and their mothers. Age levels included kindergarten, second, fourth, and sixth grade children. The investigator developed The Adult Attitude Toward the Physically Disabled Scale and the Children's Picture Sociometric Attitude Scale for the study and secured the following data for his investigation: parental educational levels; father's occupation; length of family residence in the community; acquaintance with a physically handicapped person; acquaintance with a Negro person; grade level; sex; and community. The author reported five findings:

1. Children in the sixth grade hold more favorable attitudes toward the physically disabled than do kindergarten children.

2. The attitudes of mothers and their children were positively related.

3. A positive relationship existed between the attitudes of children toward the physically disabled and toward the Negro.

4. The relationship between the attitudes of the mothers and their children toward the physically disabled did not change between the school-age levels that were tested.

5. The degree of relationship between the attitudes toward the Negro and toward the physically disabled was higher for sixth grade children than kindergarten children.[2]

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[1]Dewey J. Force, "Social Status of Physically Handicapped Children," Journal of Exceptional Children, XXIII (1956), 104-107, 132.

[2]Alexander Joseph Szuhay, "The Development of Attitudes Toward the Physically Disabled," Ph.D. dissertation, State University of Iowa (Ann Arbor, Michigan: University Microfilms, Inc., 1961), p. 84.

Knittel compared the attitudes of subjects who had physically handicapped siblings with the attitudes of subjects who did not. The experimental group included forty-five physically normal, school-age children between the ages of five and seventeen. A control group was obtained by matching on the following variables: sex, grade, intelligence quotient, number of siblings, and father's occupation. Each group contained thirty males and fifteen females. Experimental group subjects had a physically disabled sibling enrolled on an outpatient basis at the Crippled Children's Hospital and School in Sioux Falls, South Dakota, and each of the physically disabled siblings had sustained the disability at birth or within one year after birth. Control group subjects had neither a sibling with a physical disability nor a close friendship with a disabled person. All subjects in kindergarten through grade 6 were administered the Children's Picture Sociometric Attitude Scale,[1] while subjects in grades 7 through 12 were administered the Attitude Toward Severely Disabled Students (shortened form)[2] and the Attitude Toward Disabled Persons Scale.[3] The author commented that it was difficult to uncover any clearly defined trend regarding the effect of close personal contact upon the test scores of experimental group subjects. The re-

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[1]Ibid., pp. 100-116.

[2]Charles Dwight Auvenshine, "The Development of a Scale for Measuring Attitudes Toward Severely Disabled College Students," Ph.D. dissertation, University of Missouri (Ann Arbor, Michigan: University Microfilms, Inc., 1962).

[3]Harold E. Huker, J. R. Block, and William J. Campbell, "A Scale to Measure Attitudes Toward Disabled Persons," Human Resources Study No. 5 (Albertson, N. Y.: Human Resources Foundation, Division of Abilities, Inc., 1960).

sults suggest that age appears to be an important variable influencing test scores. Older experimental group subjects obtained more favorable scores than younger experimental group subjects. The opposite effect was observed when control group subjects were analyzed. Younger control group subjects responded more favorably than older control group subjects. In general, high school subjects who had crippled siblings obtained more favorable scores on the attitude scales than did those subjects who did not have crippled siblings. This finding was most apparent in test items that dealt with the ability of the disabled person to participate effectively in social situations.[1]

Smits investigated the effects of the obviousness and the severity of physical disability in relation to the self-concept scores of physically disabled adolescents. He also examined the notion that the physically disabled are relegated to a minority group status by the physically normal majority. Subjects included 125 male and 76 female adolescents attending public schools in the St. Louis area. Sample selection was based on: (1) presence of a physical disability sufficient for eligibility to receive rehabilitation services from the Missouri Division of Vocational Rehabilitation; (2) a minimum I.Q. of 90; and (3) agreement by three judges as to whether a physical disability was "obvious" or "subtle," and "severe" or "mild." Subjects were administered

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[1]Marvin Glenn Knittel, "A Comparison of Attitudes Toward the Disabled Between Subjects Who Had a Physically Disabled Sibling and Subjects Who Did Not Have a Physically Disabled Sibling," Ed.D. dissertation, State University of South Dakota (Ann Arbor, Michigan: University Microfilms, Inc., 1963), pp. 1-143.

a modified form of the Index of Adjustment and Values[1] which yielded "self-concept" and "self-acceptance" scores. Ratings of the subjects were obtained from mothers, teachers, and classmates. Group assignment was based on sex of the subject and the disability rating. The five sets of scores were then analyzed. The author drew two conclusions which relate directly to the major concern of this investigation: (1) Physically disabled adolescents, as a group, are rated significantly lower than physically normal adolescents on a sociometric device where students rated each other as friends, co-workers, and leaders; and (2) obviously disabled adolescents received more extreme (less favorable) ratings from their classmates than subtly disabled adolescents.[2]

Bateman surveyed the beliefs that sighted children hold regarding the abilities of blind children. Two hundred and thirty-two sighted children in grades 3 through 8 were studied. Of the total group, 117 subjects had attended public schools with blind schoolmates. The remaining 115 subjects had never known a blind child. Rural, urban, and suburban students from Midwest and West Coast public schools were included in the study. The author constructed a fifty-item questionnaire for the investigation. Subjects were asked to consider whether they believed a blind child their own age could perform the activity indicated by each item. Response categories included "yes," "no," and "not sure."

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[1]R. E. Bills, "An Index of Adjustment and Values," Journal of Consulting Psychology, XV (1951), 257-261.

[2]Stanley J. Smits, "Reactions of Self and Others to the Obviousness and Severity of Physical Disability," Ph.D. dissertation, University of Missouri (Ann Arbor, Michigan: University Microfilms, Inc., 1964), pp. 1-4.

Subjects who had known blind children were more positive in their appraisal of the abilities of blind children than subjects who had not known blind children. Within the group who had known blind children the positiveness of appraisal increased as a function of the number of blind children known. Urban children were more positive in their appraisals than were rural children. Positiveness of appraisal increased with grade level. Bateman concluded that the sighted generally underestimate and devaluate the abilities of the blind.[1]

Gowman also focused on the attitudes public school students have regarding the blind. He conducted an investigation utilizing two high schools from a suburban New York City area. The schools were identified as being representative of middle and lower social classes. The middle-class school group included twenty-five males and twenty-eight females. The test instrument consisted of three clusters of items: first, a series of physical disabilities was presented to subjects to be ranked as to their impact upon the subject and a prospective mate; second, thirteen situations were presented that attempted to involve the respondent and a hypothetical blind acquaintance of the same sex as the respondent; and third, the subjects were presented a series of forty-six "agree-disagree" questions focused on stereotypes held regarding the blind. Results indicated that lower-class males tended to perceive blindness in a stereotypical manner. Most often these stereotypes focused on a wide range of assumed limitations imposed by the blindness. The group com-

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[1]Barbara Bateman, "Sighted Children's Perceptions of Blind Children's Abilities," Journal of Exceptional Children, XXIX (September, 1962), 42-46.

posed of middle-class males responded in a less stereotypical fashion. While the responses of the middle-class males maintained some stereotypical features, most of those having negative implications were strongly rejected. Although there were minor variations, the over-all pattern of responses of lower-class females tended to agree with the responses of lower-class males. The group composed of middle-class females exhibited a pattern varying only slightly from the responses characterizing middle-class males. The author concluded by stressing the importance of exploring the influences of social class variables in relationship to attitudes held toward the blind.[1]

Social psychologists have frequently studied the degree of communality in the traits attributed to disabled groups by people of varied social backgrounds, experiences, and cultural identities. Investigations of different cultural groups have been carried out in recent times. Richardson et al. investigated the degree of cultural uniformity in attitudes held toward physical disability, examining two hypotheses: (1) The rank order of preferences for pictured children with various types of visible physical handicaps and without a handicap will be culturally uniform. Children of diverse backgrounds will give the same ranking. (2) The rank order of preferences will be:

Rank 1 -- A child with no physical handicap
Rank 2 -- A child with crutches and a brace on the leg
Rank 3 -- A child sitting in a wheel chair with a blanket covering both legs
Rank 4 -- A child with his left hand missing
Rank 5 -- A child with a facial disfigurement
Rank 6 -- An obese child

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[1]Alan G. Gowman, The War Blind in American Social Structure (New York: American Foundation for the Blind, 1957), pp. 64, 65.

The subjects totaled 640 males and females, ten and eleven years of age, with and without physical disabilities. The group was composed of Negroes, Puerto Ricans, and Caucasians from diverse social and cultural backgrounds. Testing was conducted in public schools and summer camps in New York, Montana, and California. The test instrument consisted of a series of drawing of children which were identical in all respects except for the presence or absence of various types of visible physical handicaps. Subjects were shown drawings that contained figures of the same sex as themselves. Tests were individually administered. Subjects were presented the drawings and requested to "Look at all these pictures." After the subject had examined the pictures, the tester said, "Tell me which boy (girl) you like best." After each response, the examiner removed the designated drawing and repeated the process until a complete ranking was obtained. The first hypothesis stated that the rank order of the drawings will be culturally uniform. Results indicated that the rank order of drawings was uniform across all sets of subjects. Within each set of subjects there was a statistically significant ($p < .001$) level of agreement on the rank orderings. The second hypothesis set forth the rank order of preferences:

1. Rank 1 -- A child with no physical handicap
2. Rank 2 -- A child with crutches and a brace on the left leg
3. Rank 3 -- A child sitting in a wheel chair
4. Rank 4 -- A child with the left hand missing
5. Rank 5 -- A child with a facial disfigurement on the left side of his mouth
6. Rank 6 -- An obese child

The data supported the second hypothesis for all sets of children. Of particular importance was the authors' observation that phys-

ically handicapped subjects ranked the six drawings in the same way as children without physical handicaps.[1] This finding was interpreted as supporting Lewin's conceptualization that the minority culture assimilates values of the majority culture.[2] A qualification is necessary in that the physically handicapped subjects were not severely disabled. The authors suggested that our mass media contribute to negative social attitudes toward physical disability. "Goodness" is almost always associated with a perfect physique, while physical ugliness is often associated with evil.

Summary

Older children appear to have more favorable attitudes toward the physically handicapped than younger children; however, a qualification is necessary: It may be that the older child is better able to discern what is socially desirable and thus responds to the test instruments accordingly. In other words, the majority of findings that indicate a positive attitude on the part of older children may reflect their increased ability to respond with socially desirable responses while suppressing responses considered less desirable by society. Further investigation is needed to clarify this issue. Most of the studies reviewed support the notion that frequent contact with the handicapped leads to the development of favorable attitudes. Once again, this finding is far

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[1]S. A. Richardson, A. H. Hastorf, N. Goodman, and S. M. Dornbach, "Cultural Uniformity in Reaction to Physical Disability," American Sociological Review, XXVI (1961), 241-247.

[2]Kurt Lewin, as cited in ibid.

from unequivocal. Indeed, as Hunt noted, mere physical presence of a disabled child in a classroom does not necessarily result in an integrated class.[1] Wright, in agreeing with Hunt's conclusion, stated:

> One of the most important arguments in support of integrating children with disabilities in the regular public schools is that it provides the opportunity for all children to become familiar with and accustomed to differences. However, just grouping children together does not necessarily provide good group experiences, either for the children with disabilities or for those without. This is an area that begs for investigation.[2]

In the majority of studies reviewed, no reliability or validity figures were reported. In studies that utilized control groups matching procedures were employed rather than random sampling procedures. The utilization of matching procedures places the internal validity of research findings in serious jeopardy. An additional threat to the integrity of the data resides in the persistent reliance upon only one major technique of data collection. Sociometry has been extensively applied to the classroom investigation of group interrelationships due to its ease of scoring, flexibility, and simplicity of administration. In almost all instances, no other kinds of measuring devices have been used in conjunction with the sociometric tools. Kerlinger comments on the problems associated with sociometry:

> The greatest weakness, however, is a weakness we have encountered before, particularly with projective methods. Many users of sociometric measures have relied upon them too much, have accepted rather than tested their reliability and validity, and have endowed sociometry with almost mystical

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[1] J. T. Hunt, "Special Education: Segregation," Education, LXXVII (April, 1957), 475.

[2] Wright, op. cit., p. 247.

qualities. This has been particularly true of practical applications of the method, but some of it has spilled over into its research use.[1]

Future investigations of school-age children should make provision for varied forms of data-collection techniques; both projective and direct approaches to the assessment of attitudes are indicated in this area of investigation.

Attitudes of College Students and Teachers

Badt investigated the attitudes held by University of Illinois students toward exceptional children. One hundred and forty-four subjects were majoring in education, while the remaining 66 subjects were enrolled in other curricula. Subjects were instructed to rank-order their preferences as to which area of exceptionality needed a special service. Subjects were also instructed to rank-order their preferences as to which group of exceptional children they would like to teach. Although differences were observed in the responses between the education group and the non-education group, both groups exhibited attitudes characterized by rejection. While the non-education students were openly hostile toward the mentally handicapped and socio-economically disadvantaged children, the education students responded with unfavorable stereotypes and wishes for the segregation of exceptional children. Both groups were equally unwilling to teach in a special classroom.[2]

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[1]Fred N. Kerlinger, Foundations of Behavioral Research; Educational and Psychological Inquiry (New York: Holt, Rinehart & Winston, Inc., 1964), p. 562.

[2]Margit I. Badt, "Attitudes of University Students Toward Exceptional Children and Special Education," Journal of Exceptional Children, XXIII (April, 1957), 286-290.

Kvaraceus measured the attitudes of eighty-four graduate-school students toward exceptional children. The majority of subjects were regular classroom teachers. Categories covered included mentally retarded, emotionally disturbed, physically handicapped, delinquent, overt-aggressive type, blind and partially seeing, deaf and hard of hearing, superior and gifted, and the speech handicapped. Subjects were instructed to rank the areas of exceptionality along a continuum of most informed to least informed. Results indicated that the overtly-aggressive delinquent was least preferred, while the gifted and superior was the most preferred group. The author also reported on the lack of knowledge expressed by the subjects regarding the categories of the blind and partially seeing, the deaf and hard of hearing, and the physically handicapped.[1]

Auvenshine developed a scale to measure attitudes toward severely disabled college students. The 150-item scale included the following areas: (1) activities of daily living; (2) personal characteristics; (3) social activities; (4) academic activities; and (5) special privileges.[2]

The final scale was administered to 316 college students. The variables of sex, age, and university division were investigated. Each of the 150 items discriminated between "favorable" and "unfavorable" respondents at the .05 level of significance. The author reported the

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[1]William C. Kvaraceus, "Acceptance-Rejection and Exceptionality," Journal of Exceptional Children, XXII (May, 1956), 328-331.

[2]Auvenshine, op. cit.

following findings:

1. Females expressed more favorable attitudes than males.

2. Older males expressed more favorable attitudes than younger males.

3. There were no significant differences in expressed attitudes between older and younger females.

4. Males in higher grade levels expressed more favorable attitudes than males in lower grade levels.

5. There were no significant differences between females in higher grade levels and those in lower grade levels.

6. Attitudes held toward disabled students are general in nature rather than specific to a particular content area.

7. Finally--both males and females in education tended to express more favorable attitudes than males and females in other curricula.[1]

Rusk and Taylor investigated the attitudes of fifty college students toward amputees and deaf persons. Approximately 65 per cent of the subjects reported they would not marry a leg amputee. Fifty per cent of the subjects said they would not socialize with such a person. Eighty-five per cent of the subjects reported that they would not marry a deaf person. Seventy-two per cent of the subjects reported they would not date a deaf person.[2]

Yuker, Block, and Campbell measured the differences in attitudes expressed by college students having an instructor with cerebral palsy as compared to college students taught by a non-disabled instructor. The students who had an instructor with cerebral palsy scored higher

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[1] Ibid.

[2] H. A. Rusk and E. J. Taylor, New Hope for the Handicapped (New York: Harper & Brothers, 1956), p. 231.

(greater acceptance) on the ATDP when compared to the control group class taught by the non-disabled instructor.[1]

Other investigators have focused their attention on the attitude that educators have regarding exceptional children. Haring et al. reported that teachers probably feel less accepting toward the handicapped than they do toward typical children. In a study mentioned earlier, forty-four classroom teachers in two public schools were interviewed. The only structuring for the interview consisted of the question, "How would you react to the possibility of having a blind or crippled child in your class?" Analysis of responses indicated that 38 per cent of the teachers expressed feelings of pity; 25 per cent expressed feelings of fear; and 22 per cent expressed feelings of rejection.[2]

Rickard investigated the attitudes of personnel directors and school administrators toward hiring individuals with disabilities. Questionnaires were administered to thirty-two personnel directors and 140 school administrators and prospective school administrators. The subjects were instructed to assume that a person with a specific physical characteristic was applying for a particular job. The occupations of accountant and third-grade teacher were chosen for research. The disability areas included deafness, an individual confined to a wheel chair, a person discharged from a tuberculosis sanitorium, a person discharged from a mental institution, and a person discharged from a prison. Within the school administrator group, the ex-tubercular patient and the

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[1]Yuker, Block, and Campbell, op. cit., p. 8.

[2]Norris G. Haring, George G. Stern, and William M. Cruickshank, Attitudes of Educators Toward Exceptional Children (Syracuse, N. Y.: Syracuse University Press, 1958)

person confined to a wheel chair retained low prejudice scores in every instance for the accounting and teaching positions, but were rejected when compared to the non-physically handicapped. Of the six disabilities studied, the ex-tubercular patient was the most acceptable job applicant to the personnel directors group. The second most acceptable job applicant was the person confined to a wheel chair and, following in succession, the deaf and ex-mental patient. The epileptic and parolee were least acceptable to both the personnel directors and the school administrators. Rickard next analyzed the relationship of personality factors to the questionnaire data. Both samples were administered the F Scale.[1] In addition, the school administrators also received the Dogmatism Scale.[2] Results indicated that subjects who scored high on the F Scale and Dogmatism Scale were also high in employment prejudice. Thirty correlations were obtained, all being positive. Approximately 50 per cent of the correlations were significant at the .05 level. Correlations tended to be higher and more often significant in relationship to the parolee and ex-mental patient. The author concluded by noting that attitudes toward the parolee and ex-mental patient appeared to be more stereotyped than the other disabilities included for investigation.[3]

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[1]This scale attempts to measure prejudice without appearing to have this as a goal. No minority groups, as such, are mentioned within the F Scale (Authoritarianism). See Adorno et al., op. cit.

[2]Individuals scoring high on the scale were assumed to have relatively closed belief systems, while persons who scored low were assumed to have relatively open belief systems. See Milton Rokeach, The Open and Closed Mind (New York: Basic Books, Inc., 1960).

[3]Thomas Edwin Rickard, "Indices of Employer Prejudice: An Analysis of Psychological Aspects of Prejudice Toward the Disabled Worker," Ph.D. dissertation, University of Illinois (Ann Arbor, Michigan: University Microfilms, Inc., 1962), pp. 1-89.

Summary

There is a relative paucity of studies that report on the attitudes of college students and teachers. Additional investigation is needed in this area before any definitive statements are possible. Tentative findings indicate that segments of the college student population react with stereotypical perceptions and attitudes toward the physically handicapped. After reviewing studies that explored the effect of education on attitudes toward ethnic minority groups, Allport concluded:

> Regarding education, it generally but not always appears from researches that people with college education are less intolerant than people with grade school or high school education (at least they answer questions in a more tolerant way).[1]

Additional research is needed to clarify this issue.

Also, teachers-to-be as well as practicing teachers have displayed ambivalent and often negative attitudes toward the physically handicapped. Further investigation in this area is crucial in light of the pervasive influence that classroom teachers are capable of exerting on the attitudes of their students.

Other Investigations

Braverman and Schauer, in separate articles, discussed the sources of negative attitudes held toward the blind. Both authors interpreted the negative perceptions held by the sighted as being symptomatic of unconscious fear and anxiety triggered by contact with blind

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[1]Allport, op. cit., p. 78.

individuals.[1,2]

Roeher investigated the effect of knowledge about disabilities and contact with handicapped individuals in relationship to attitudes toward the handicapped. Subjects were obtained from a list of contributors to a province-wide (Saskatchewan) rehabilitation fund campaign. Five hundred questionnaires were mailed to the initial pool of subjects. Of the initial group of questionnaires, 60 per cent were available for analysis. Based on an evaluation of attitude scale scores, information data, and biographical material, the author reported the following conclusions: (1) The more contact that a non-handicapped person has with a physically disabled person, the more likely the non-handicapped person will develop positive attitudes. (2) The more information a person has about physical disabilities, the more likely the concomitant attitude toward the handicapped will be positive.[3]

Nash explored the attitudes of 74 non-handicapped subjects toward the orthopedically handicapped. Subjects were foster-home applicants to an agency engaged in securing placements for severely orthopedically handicapped individuals. Data-collection techniques included social attitude measures and interview material. Subjects who were more

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[1]Sydell Braverman, "The Psychological Roots of Attitudes Toward the Blind," Social Research Series No. 1 (New York: American Foundation for the Blind, 1951), pp. 22-32.

[2]Gerhard Schauer, "Motivation of Attitudes Toward Blindness," Social Research Series No. 1 (New York: American Foundation for the Blind, 1951), pp. 5-10.

[3]G. A. Roeher, "A Study of Certain Public Attitudes Toward the Orthopedically Disabled," Ph.D. dissertation, New York University (Ann Arbor, Michigan: University Microfilms, Inc., 1959)

tolerant were, as a group, younger, currently married, and of a higher educational level. The study uncovered no relationship between attitudes toward the orthopedically handicapped and race, religion, or previous contact with the handicapped. This finding was in opposition to Roeher's conclusion that attitudes toward the physically handicapped were more positive as a function of previous contact. Nash reported that for the majority of the subjects the physical appearance of the handicapped person was a more important criterion of social acceptability than the ability to function independently.[1]

MacGregor came to the same conclusion as Nash. He interviewed a group of facially disfigured persons and reported that his subjects felt that the attitudes of the non-disabled were negative toward facial disfigurement. Attitudes ranged from mild disapproval to open rejection and hostility.[2]

The nature of help, as perceived by the disabled individual, was analyzed in a study by Ladieu, Hanfmann, and Dembo. The authors interviewed a group of subjects to determine their responses to help (bodily assistance) they had received. Half of the subjects reported more negative experiences than positive experiences when relating their impressions about the help they had received. Frequently, the act of helping

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[1]M. V. Nash, "A Study of Attitudes of a Group of Non-Handicapped People Toward the Orthopedically Handicapped," Ph.D. dissertation, Columbia University (Ann Arbor, Michigan: University Microfilms, Inc., 1962), p. A review of the reaction to physical appearance as portrayed in literature has been made by E. Maisel, Meet a Body, Institute for the Crippled and Disabled, New York, 1953 (unpublished manuscript).

[2]F. C. MacGregor,"Some Psycho-Social Problems Associated with Facial Deformities," American Sociological Review, XVI (1951), 629-638.

the disabled individual was experienced as a reduction of status.[1]

Goffman introduced the concept of stigma to embrace a larger population than most researchers have included in analyzing majority-minority relationships. Stigma is interpreted to mean a negative attitude toward someone not quite like ourselves. In the author's preliminary conceptions he outlined three main types of stigma:

1. Abominations of the body--i.e., physical deformities.

2. Blemishes of character--weak will, domineering, dishonesty, etc., inferred from a record of mental disorder, psychopathic personality (imprisonment, addiction, alcoholism), homosexuality, unemployment, suicide attempts, radical political behavior.

3. Tribal stigma--either race, religion, or nation, i.e., represents a hereditary process contaminating the whole family.[2]

In these examples the individual is viewed as possessing qualities which are interpreted as an "undesired differentness" from what the onlooker anticipated. Goffman presented the reactions of others to the stigmatized individual as follows:

1. The individual is considered "not quite human."

2. Discrimination is exercised, thereby reducing the life opportunities of the stigmatized individual.

3. Sometimes animosity is structured replacing feelings about his inferiority--based on something such as social class.

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[1]G. Ladieu, E. Hanfmann, and T. Dembo, "Studies in Adjustment to Visible Injuries: Evaluation of Help by the Injured," Journal of Abnormal Social Psychology, XLII (1947), 169-192.

[2]E. Goffman, Stigma: Notes on Management of Spoiled Identity (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1963)

4. Terms are employed such as cripple, bastard, moron, as metaphorical descriptions without thought of their original meaning.

5. The onlooker may attribute many imperfections to the original one. He may also attribute new desirable, yet undesirable traits such as supernatural powers (e.g., sixth sense understanding).[1]

The construct of marginality has been advanced by social scientists to describe the individual who finds himself in two frequently contradictory social-cultural worlds. In considering its relevance to the physically handicapped in America, Barker et al. suggested that the handicapped individual in a marginal social position may consequently experience conflict and maladjustment. He theorized that it may be desirable to create restricted educational and social environments which are less ambiguous and offer a more secure anchoring for the handicapped person.[2] The serious difficulty posed by this approach was raised by the authors:

> Right here is the basis of one of the serious practical problems met in providing for disabled persons. On the one hand, marginality can often be overcome by providing segregated schools and workshops but, on the other hand, these easily become narrow and tend to produce egocentricity. To create educational and vocational opportunities that avoid egocentricity without creating marginality, or avoid marginality without creating egocentricity, appears to be a difficult problem, but not an insoluble one.[3]

In some instances, the handicapped person may be seen as being markedly different from a non-handicapped person. Schachter reports that

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[1] Ibid.

[2] Barker et al., op. cit., p. 111.

[3] Ibid.

those who reject the physically disabled tend to see a great difference between themselves and the physically handicapped.[1] Wright has theorized about the motivational forces that cause some members of the non-handicapped majority to assign handicapped individuals to inferior social positions:

> When a person has a need to safeguard his values, he will either (1) insist that the person he considers unfortunate is suffering (even when he seems not to be suffering) or (2) devaluate the unfortunate person because he ought to suffer and does not. This implies that the devaluer wants the unfortunate person to suffer. He wants him to suffer as a sign that the values denied the unfortunate person are still worthy and important and good. Especially if his security depends upon maintaining these values will he insist that the unfortunate person admit his suffering.[2]

The author has referred to this concept as the "requirement for mourning." Allport provides a poignant illustration of this type of interaction:

> I know a man who had lost the use of both eyes. He was called a blind man. He could also be called an expert typist, a conscientious worker, a good student, a careful listener, a man who wanted a job. But he couldn't get a job in the department store order room where the employees sat and typed orders which came over the telephone. The personnel man was impatient to get the interview over. "But you're a blind man," he kept saying, and one could almost feel his silent assumption that somehow the incapacity in one aspect made the man incapable in every other.[3]

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[1] S. Schachter, "Deviation, Rejection, and Communication," Journal of Abnormal and Social Psychology, XLVI (April, 1951), 201.

[2] Wright, op. cit., pp. 242-243.

[3] Allport, op. cit.

Final Summary

Much of the evidence reviewed consists of the personal opinions of investigators, rather than outcomes of research undertakings. Although some disagreement is evident, most investigators agree that the social position of the physically disabled is comparable to the undervalued social position of ethnic and racial minority groups. Several methodological problems are associated with the majority of studies that attempted to measure the attitudes of test subjects. For example, in the section that reported on the attitudes of school-age children, a striking illustration of the exclusive and continuing reliance upon sociometric data-collection techniques was evidenced.

Webb et al. commented on the inherent threat to internal validity associated with a persistent reliance upon one method of data collection.

> . . . if the restraints on validity sometimes seem demoralizing, they remain so only as long as one set of data, one type of method, is considered separately. Viewed in consort with other methods, matched against the available outcroppings for theory testing, there can be strength in converging weakness.[1]

The message is clear--the persistent utilization of only one type of data-collection technique places the internal validity of research findings in serious jeopardy. Multiple measurement techniques offer the investigator the opportunity of obtaining data that are intrinsically more valid than the data resulting from only one kind of data-collection methodology.

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[1]Eugene T. Webb, Donald T. Campbell, Richard D. Schwartz, and Lee Sechrest, Unobtrusive Measures: Nonreactive Research in the Social Sciences (Chicago: Rand McNally & Co., 1966), p. 29.

A second problem associated with the data reviewed relates to the issue of external validity. In almost all instances "captive" or conveniently accessible research groups were studied. A striking discrepancy is apparent when the data derived from the various studies and the interpretations and inferences made by investigators are reviewed. An effort should be made to obtain samples that, within sampling error ranges, will reflect a clearly defined population. At this stage, no generalizations regarding population parameters are possible. A related problem deals with the lack of experimenter vigilance in seeking out opportunities to utilize randomization in experimental designs where possible. Webb et al. have stated:

> It is a sad truth that randomized experimental design is possible for only a portion of the settings in which social scientists make measurements and seek interpretable comparisons. The number of opportunities for its use may not be staggering; but, where possible, experimental design should by all means be exploited. Many more opportunities exist than are used.[1]

In general, the test items employed represent a severely restricted sample of items. The main problem has been one of relying on a small number of items that were purported to be capable of adequately sampling a subject's general attitude. It may be edifying to know that Johnny Jones was chosen significantly fewer times as a potential studymate, but this does not necessarily mean that Johnny Jones would receive the same amount of choice-rejects if a different behavioral-interaction were posed to the subject. It appears that most testing instruments are composed of highly restricted item samples. As Green states, "To obtain

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[1] Ibid.

reliable, valid scales we need good scaling techniques, to be sure, but we also need good items."[1]

Our attitude measures should hopefully sample relevant aspects of the assumed attitude universe. Evidence should be gathered from a variety of responses to hypothetical and real-life situations. Indeed, the very concept of attitude subsumes a consistency of responses to a variety of stimuli.[2] Although the presence of negative responses in one specific area may conceivably have a pervasive, detrimental effect on the life-space opportunities of a handicapped child, adolescent, or adult, it does not automatically follow that a single response or cluster of responses in a specific behavioral interaction is indicative of the subject's responses to a wide array of socio-cultural interactions.

On a more idealistic level, it appears that sufficient knowledge is available to enable investigators to plan and execute their research activities on the basis of theory-oriented models. At the very minimum, the investigator should provide concepts and propositions within his research design that will be subject to scrutiny upon completion of the study. This requirement has infrequently been encountered in the research that has been reviewed. Goffman, Wright, and Barker, in their respective discussions, represent fruitful attempts to satisfy this requirement.

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[1]Bert F. Green, "Attitude Measurement," Chapter IX in Handbook of Social Psychology: VI. Theory and Method, op. cit., p. 366.

[2]"An individual's social attitude is an enduring syndrome of response consistency with regard to [a set of] social objects." Ibid., p. 336.

A final issue deals with the intimate relation between the substantive questions of any research problem and the decision as to how the data will be collected. Certain questions or hypotheses may be tested adequately by simply asking the subject his opinion. Other questions or hypotheses may require more sophisticated approaches to securing the necessary data. The following section will provide an extensive review of literature on direct and indirect assessment techniques leading to a consideration of the specific data-collection techniques and procedures that appear necessary in the problems being investigated in this study.

CHAPTER III

DISCUSSION OF DESIGN NEEDS

Background

In reviewing literature dealing with the validity of personality questionnaires, Ellis analyzed two hundred and seventy-four validation studies. He concluded that paper-and-pencil questionnaires did not effectively discriminate between normal and abnormal individuals.[1] In an earlier study, Frank examined the stability of responses to individual items of the Bernreuter Personality Inventory. He felt that the personality questionnaire would be of questionable value as a clinical instrument until situational and other factors influencing a test situation could be accounted for.[2] More recently, Murstein stated, "We should give more weight to the purpose of testing, as perceived by both the examiner and the testee, as well as its sociological meaning."[3] As early as 1929, Thurstone and Chave reported that responses to an attitude scale may not be indicative of what a subject believes.[4] The social scientist

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[1]Albert Ellis, "The Validity of Personality Questionnaires," Psychological Bulletins, XLIII (1946), 385-440.

[2]Benjamin Frank, "Stability of Questionnaire Responses," Journal of Abnormal and Social Psychology, XXX (1936), 320-324.

[3]Bernard I. Murstein (ed.), Handbook of Projective Techniques (New York: Basic Books, Inc., 1965), p. xvii.

[4]L. L. Thurstone and E. J. Chave, The Measurement of Attitude (Chicago: The University of Chicago Press, 1929), pp. 8, 9.

is continually confronted with the possibility that pressures of the test situation may influence the subject to conceal his real attitude on a given question. Recently, Edwards presented evidence which supported Thurstone and Chave's earlier observation.[1] Edwards demonstrated that responses to questionnaires are highly correlated with the "social desirability" of the particular test item.[2] In other words, scores on personality and social attitude scales may include not only an individual's response toward the object of inquiry but also his willingness or unwillingness to express opinions that are viewed as socially undesirable. One would expect the measurement of majority group attitudes toward minorities to be an area especially susceptible to the problem cited by the above researchers.

In recent years, majority-minority relations have been studied intensively. A major focus of this research effort has been on the attitudes that the majority-group member holds toward the minority-group member. Investigators have repeatedly noted the difficulties in assessing the sentiments that an individual does in fact hold toward a particular minority. Bettelheim and Janowitz reported that the interviewing of subjects to explore the presence and degree of anti-Semitic feelings is at best an extremely difficult task. The interviewer must be constantly aware of the subject's propensity to suppress as well as selectively to

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[1] Ibid.

[2] Allen L. Edwards, The Social Desirability Variable in Personality Assessment and Research (New York: Dryden Press,), p. 39.

distort responses that are contrary to prevailing social expectations.[1] Adorno et al., in their study of the Authoritarian Personality, observed that an individual may hold two different sets of attitudes on the same question. "There may be a discrepancy between what he says on a particular occasion and what he 'really thinks.'"[2] One of the best-known statements in the area of social science regarding the "public-private" variable was presented by Gunnar Myrdal. In his classic treatise, An American Dilemma,[3] Myrdal distinguished between the "public" and "private" levels of personality functioning in relation to attitudes held toward the Negro:

> When studying valuations there is another distinction the observance of which is of utmost significance in the Negro problem as in other problems where human valuations are sharply conflicting, namely, the distinction between a person's "private" or "personal" opinion and his "public" or "political" opinion on the same question. They do not need to agree; in fact, they seldom agree. This, in itself, is a reason for a clear distinction to be upheld, since otherwise a major source of systematic error is contained in the observations. A further reason is that the very registration and measuring of this difference is an important part of the opinion analysis.[4]
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> The distinction between public and private attitudes also comes out with regard to what one will or will not admit with respect to the Negro.[5]

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[1]Bruno Bettelheim and Morris Janowitz, Social Change and Prejudice (Glencoe, Illinois: Free Press of Glencoe, 1964), p. 113.

[2]T. W. Adorno, Else Frenkel-Brunswick, Daniel J. Levinson, and R. Nevitt Sanford in collaboration with Betty Aron, Maria Hertz Levinson, and William Morrow, The Authoritarian Personality (New York: Harper & Brothers, 1950), p. 3.

[3]Gunnar Myrdal, An American Dilemma (New York: Harper & Row, Publishers, 1944).

[4]Ibid., p. 1,139.

[5]Ibid., p. 1,140.

One is led to conclude that the social sciences need to develop instruments that will effectively measure attitudes of highly conflicted objects of inquiry. This need seems especially crucial if the field of inquiry is social attitudes toward minority groups, including physically handicapped groups. It is vital to develop methodological strategies and techniques that will successfully circumvent the tendency of subjects to respond on the basis of their desire to appear socially acceptable. Jahoda et al., as late as 1951, commented:

> The social scientist, in contrast to the clinical psychologist, has no well-developed projective techniques at his disposal. The development of standardized projective techniques to measure social attitudes, however, is to be expected in the not distant future.[1]

The following section will report on attempts that have been made to meet the need expressed by Jahoda.

The Sentence Completion Test--A Brief Review

The following review will concern itself with the past development and current status of the Sentence Completion Test (S.C.T.).[2] The material to follow will lead to a consideration of the instrument used herein.

Tendler pioneered in the development of the S.C.T., which he employed to evaluate the personalities of college females. He indicated

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[1]Marie Jahoda, Morton Deutsch, and Stuart W. Cook, Research Methods in Social Relations (New York: Holt, Rinehart & Winston, Inc., 1964), p. 212.

[2]A psychological testing approach in which the respondent completes partially written sentences; ex.: "My favorite _____ _____." The rationale underlying the S.C.T. will be discussed later in the review.

that the instrument had promising potentials for psychosocial research. "Clinically the instrument has been found to be of value as a device for eliciting attitudes, trends, and significant clues to be followed up by further questioning."[1]

Sacks and Levy, in briefly reviewing the development and current status of the S.C.T., stated that items can be developed to measure clusters of attitudes. Mention was made of an attitude scale administered to a handicapped group for the purpose of determining the attitudes of the group toward their specific handicaps.[2] The investigators also reported on the Sacks S.C.T. created for use with war veterans. The sixty-item test included the areas of family, sex, interpersonal relationships, and self-concept. Three psychologists rated the degree of disturbance in each of the categories based on the responses of one hundred subjects. The psychiatrists who treated these individuals made independent ratings of the degree of disturbance in each category. Two out of three of the psychologists agreed on 92 per cent of the 1,500 ratings. Validation studies employing the Rorschach and Thematic Apperception Test also indicated significant positive correlations.[3]

Murstein, who edited the Handbook of Projective Techniques, concluded that the S.C.T. has proven to be a valuable instrument:

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[1]A. D. Tendler, "A Preliminary Report on a Test for Emotional Insight," Journal of Applied Psychology, XIV (1930), 136.

[2]Joseph M. Sacks and Sidney Levy, "The Sentence Completion Test," in Projective Psychology, ed. Lawrence Edwin Abt and Leopold Bellak (New York: Grove Press, 1950), p. 357.

[3]Ibid., pp. 370-397.

> The perhaps most unexpected finding involving projective techniques over the past twenty years has been the strong showing made by the sentence completion method in a variety of studies with adults, as demonstrated clearly by Goldberg's review.[1]

Goldberg comprehensively reviewed previous research that utilized the S.C.T. The findings were interpreted as being encouraging, especially in comparison with other projective techniques:

> The sentence completion is a valuable instrument in the assessment of personality that compares favorably to other standard instruments. A considerable, generally favorable, research literature tends to justify its wide clinical and research use.[2]

Rotter stated that the S.C.T. approach is quite flexible and can be adapted to fit a variety of uses. While it has been utilized to study social attitudes, it seems suited for the study of group attitudes and opinions as well. A major advantage of the S.C.T. mentioned by the author is the fact that it can be administered to a group and still retain the advantages of projective tests that are usually administered individually.[3] Stein discussed the effect of speed in responding to the S.C.T. as well as using test items containing third person references. The author recommended that future research should be directed toward investigating which type sentence, direct or projective, yields more accurate information when checked against life history data and clinical

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[1]Murstein, op. cit., p. xviii.

[2]Philip A. Goldberg, "A Review of Sentence Completion Methods in Personality Assessment," in Murstein, op. cit., p. 813.

[3]Julian B. Rotter, "Word Association and Sentence Completion Methods," in An Introduction to Projective Techniques, ed. Harold H. Anderson and Gladys L. Anderson (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1951), p. 310.

observations.[1]

During World War II, the Office of Strategic Services relied heavily upon the S.C.T. Various projective tests were utilized during the assessment program. The S.C.T. was increasingly utilized throughout the evaluation program and was the only projective device still in use at the end of the program.[2] Shor carried out approximately 1,800 clinical personality studies in five military installations. The author concluded that the S.C.T. is a valuable diagnostic and prognostic tool. He also pointed out the flexibility of the instrument since it can be adapted easily to fit the needs of each particular testing situation.[3] Meltzoff investigated the effect of the subject's "set" as well as the nature of the stimulus structure of the incomplete sentence items.[4] An S.C.T. was administered under four different conditions to 120 college students. The sentence stems were evaluated by clinical psychologists as positively toned, negatively toned, and neutral. Four different test conditions were employed. Test responses were judged as positive, negative, or neutral. The results indicated that both the instructions and stimulus characteristics of the S.C.T. largely determined the content of the responses:

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[1]Morris I. Stein, "The Use of a Sentence Completion Test for the Diagnosis of Personality," Journal of Clinical Psychology, III (1947), 47, 48.

[2]Office of Strategic Services Assessment Staff, Assessment of Men (New York: Rinehart and Company, Inc., 1948), p. 71.

[3]Joel Shor, "Report on a Verbal Projective Technique," Journal of Clinical Psychology, II (1946), 282.

[4]Julian Meltzoff, "The Effect of Mental Set and Item Structure on Responses to a Projective Test," in Murstein, op. cit., p. 835.

> The results of this investigation demonstrate that the responses to a projective test of this type vary systematically according to the conditions under which the test is administered. The total situation in which the stimuli are presented, including the S's conception of the purpose of the test and the extent to which it threatens his self-esteem, influences the results obtained.[1]

The investigator concluded by indicating that the tone of the responses to the S.C.T. is a direct function of the subject's set as primarily determined by the test instructions.[2]

Campbell emphasized the need to measure social attitudes with instruments which will not distort the form of the attitude while describing it. The author also recommended an approach that will allow the respondents to be less guarded in their reactions.[3] After reviewing test approaches to fulfill these criteria, Campbell advocated the use of disguised semistructured tests.[4] The construction of such a test depends on satisfying the following requirements: (1) a plausible task must be introduced which all subjects will strive to do well; (2) the task must be sufficiently difficult or ambiguous to allow for individual differences in responses; (3) the test must be loaded with content relative to the attitude one seeks to measure.

Hanfmann and Getzels evaluated the S.C.T. to determine the extent to which responses are representative of attitudes that the respondents do in fact have. After administering an S.C.T. to twenty-seven adolescent

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[1] Ibid., p. 854.

[2] Ibid., p. 856.

[3] Donald T. Campbell, "The Indirect Assessment of Attitudes," Psychological Bulletin, XLVII (1950), 15.

[4] Ibid., p. 33.

Negro and Caucasian females, the subjects were questioned about the source of the completions given. Seventy per cent of the subjects responded to the post-test inquiry by acknowledging the completed sentence might be true of them.[1]

In a book devoted to the sentence completion method, Rhode stated that the S.C.T. is adaptable and capable of being administered to groups of individuals in varied settings. Simplicity of scoring was reported as one attribute. Her review of research disclosed that the S.C.T. has effectively measured family relationships, sex differences, social attitudes, and school adjustment.[2]

Davids and Pildner reviewed literature that reported on the validity of direct personality assessment techniques. The authors felt that situational and motivational factors are probably more critical problems in assessment than the validity of the direct personality inventories and questionnaires. The authors raised the crucial question of the intervalidation between projective and direct assessment measures. Comparison of direct and projective responses has revealed frequent contradictions. Davids and Pildner strongly asserted that the increasing tendency to perceive the two approaches as separate entities measuring a different level of personality is hasty and detrimental to achieving a

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[1]Eugenia Hanfmann and Jacob W. Getzels, "Studies of the Sentence Completion Test," Journal of Projective Techniques, XVII (1953), 293, 294.

[2]Amanda R. Rhode, The Sentence Completion Method (New York: The Ronald Press Company, 1957), p. 17.

unified approach to personality assessment: "Personality appraisal, particularly in real life assessment situations, must be based on both direct and projective measurement if maximum validity is to be achieved."[1]

Getzels and Walsh reported on the differentiations that exist in basic psychological assessment approaches:

Direct	Projective
1. Mechanistic models of human behavior.	1. Dynamic model of human behavior.
2. Recording observed habits.	2. Eliciting underlying motives.
3. Asking direct questions.	3. Posing projective stimuli.

These distinct approaches are exemplified by the diversity of direct and projective instruments utilized in clinical and research problems. The authors comment that these separated approaches frequently provide a variety of data without any conceptual, substantive, or methodological common denominator. The authors assert that the notion of "internal-external" has not been the major problem. The lack of an effective methodology for determining "internal" and "external" responses to the same stimulus and analyzing the relationships between these hypothesized levels has been a major problem facing researchers.[2]

Allport stated that a valid personality assessment cannot be obtained by relying only on projective techniques:

> What seems to be important is the implication of the researches that a psychodiagnostician should never employ pro-

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[1]Anthony Davids and Henry Pildner, Jr., "Comparison of Direct and Projective Methods of Personality Assessment Under Different Conditions of Motivation," Psychological Monographs, LXXII, No. 11 (1958), 21.

[2]Jacob W. Getzels and J. J. Walsh, "The Method of Paired Direct and Projective Questionnaires in the Study of Attitude Structure and Socialization," Psychological Monographs, LXXII, No. 1 (1958), 23.

> jective methods in the study of motivation without at the same time employing direct methods. If he does not use direct methods he will not be able to distinguish a well integrated personality from one that is not. Nor will he be able to tell whether there are strong conscious streams of motivation that are entirely evading the projective situation.[1]

In his most recent publication, Allport stressed the same concept again:

> Let us, however, raise one important question. Will projective methods, if used alone, tell us what kind of personality we are dealing with? Suppose, for example, that a subject shows great anxiety in several projective methods. But suppose that by direct methods (tests, scales, questionnaires, self-appraisal) he denies feeling anxiety. Is he not a very different kind of person from the one who by both direct and projective methods displays anxiety? The former case is clearly badly integrated and defensive and perhaps neurotic. The latter case has excellent insight; he knows he is a nervous and apprehensive person. For him projective methods yield nothing that conscious report does not yield. It is impossible, therefore, to evaluate the disclosures of projective methods unless we also have an assessment based on direct methods, giving the subject's conscious reports. . . . Unless both direct and projective techniques are employed we shall not be able to interpret the significance of the latter.[2]

The Paired, Direct-Projective Sentence Completion Test (PDPQ)[3] is proposed as an approach that may be capable of bridging the gap be-

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[1]Gordon Allport, Personality and Social Encounter (Boston: Beacon Press, 1960), pp. 99-100.

[2]Gordon Allport, Pattern and Growth in Personality (New York: Holt, Rinehart & Winston, Inc., 1961), pp. 443-444.

[3]A sentence completion test that is divided into two sections. The direct questionnaire utilizes incomplete sentence items written in the first person. No attempt is made to disguise the self-referent quality of the items. The projective half of the questionnaire is disguised in that items are written in the third person form, and the test is presented to the respondents as a verbal speed test. Every test item in the direct questionnaire has a content-equated test item in the projective questionnaire.

tween direct and projective approaches to personality and attitude measurement, thereby hopefully producing a more complete personality portrayal.

Background of Proposed Instrument

The research carried out by Getzels represents an attempt to meet the methodological and theoretical needs previously cited.[1] Getzels compared the relationship between responses of forty-eight freshman and sophomore college females to both direct and projective sentence completion items designed to assess attitudes toward parents, degree of religious tolerance, extent of self-worth, and attitudes toward the Negro. This study will be reported in considerable detail since the present investigation has included portions of the author's work for replication.

The question-answer process was conceptualized as a three-step sequence:

1. The question acts as a stimulus for a personal hypothesis (internal reaction).
2. The personal hypothesis is checked against the social expectations (role requirements) of the stimulus-situation complex.
3. The personal hypothesis is distorted, if necessary, in the expressed response (external reaction) to conform to situational demands relative to personal needs.

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[1]Jacob W. Getzels, "The Assessment of Personality and Prejudice by the Method of Paired Direct and Projective Questionnaires" (unpublished Doctoral dissertation, Harvard University, 1951).

The relationship between projective responses and direct responses should conform to the relationship between personal hypotheses and expressed reactions derived from the conceptualized question-answer process. As was mentioned, the method of paired direct and projective questionnaires was created to elicit projective and direct responses to the same object of inquiry. Items were written in a parallel direct and projective form to enable ready comparison between a given respondent's self-report and his projection to the same object of inquiry. For example, when the object of inquiry was Leadership:

a. Projective question: "When they asked Frank to be in charge, he _____."

b. Direct question: "When they asked me to be in charge, I _____."

The projective instrument consisted of fifty-nine items of three types: socially conflicted objects of inquiry,[1] socially neutral objects of inquiry,[2] and "fillers" or decoy items. The major experimental objects of inquiry included attitudes toward parents, self-competence, religion, and minority groups. The direct instrument contained forty

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[1]A "socially conflicted object of inquiry" is one for which there is a normative social expectation of "right" and "wrong" responses, but the expectation has not been satisfactorily internalized by large sections of the population. For example, the Negro is a socially conflicted object of inquiry. Individuals are aware that they are expected to have an attitude which they may not actually have.

[2]A "socially neutral object of inquiry" is one for which there is no normative social expectation of "right" and "wrong" responses. For example, the preference for one of two colors is ordinarily a socially neutral object of inquiry.

items matching in content the forty test items of the projective instrument. The wording of the items of the direct questionnaire was similar to the wording of the matched projective items on the projective questionnaire, except that the third person pronouns of the projective questionnaire were changed to first person pronouns on the direct questionnaire. The projective instrument was presented as a verbal speed test to the subjects. Considerable emphasis on speed was employed in administering the first test. The second instrument was administered sixteen days later. Both measures were administered during regular class hours by the course instructor.

The items employed in the Negro Scale included the following:

1. When Alice saw Negroes moving in next door, she . . .
2. When they put a Negro forelady over her, Edna . . .
3. When Jane saw the doctor they were trying to give her was a Negro, she . . .
4. When Jean saw her younger sister dancing with a Negro, she . . .
5. When Janice discovered the school she was planning to enter was half Negro, she . . .
6. When her favorite beauty shop began being used by Negroes, Barbara . . .
7. When Negroes began being admitted to the club, Ethel decided . . .
8. When the boss began hiring many Negroes, Evelyn . . .
9. When they put a Negro to work next to her, Gail decided . . .
10. When Edith saw a Negro and a white involved in the accident, she naturally blamed the . . .

The items employed in the Self-Competence Scale included these:

1. When Joan thought the job was too much for her, she . . .
2. When Janet had something to say and others were around, she . . .
3. Most jobs with responsibility made Nora feel . . .
4. When Alice saw others doing better than she, Alice . . .
5. When told she would have to do the whole thing by herself, Ruth . . .
6. When Nan thought the odds were against her, she . . .
7. Working with others all the time made Jane . . .
8. Every time they didn't invite Betty to the party, she . . .

The items employed in the Parental Attitude Scale included the following:

1. Ruth sometimes thought her father was . . .
2. When they tried to get Margaret to be like her mother, she . . .

The items employed in the Religious Tolerance Scale included these:

1. When the man running for mayor admitted he did not believe in God, Joan decided . . .
2. When she found out the candidate belonged to a different religion, Ruth decided . . .

The Negro as the Object of Inquiry

A discrepancy between projective and direct responses involving the expression of positive or negative attitudes toward the Negro was hypothesized. Results indicated that the differences between personal hypotheses and expressed reactions were statistically significant for

each of the items. Five items were statistically significant at the .001 level,[1] three items were significant at the .01 level,[2] one item was significant at the .02 level,[3] and the remaining item was significant at the .05 level.[4] That is to say, there were significant shifts occurring in the responses to all ten items dealing with the Negro. The changes in responses were in the predicted direction of negative responses on the projective questionnaire to positive responses on the direct questionnaire. The data confirmed the hypothesis that the Negro is a highly conflicted object of inquiry.

Personal Competence as the Object of Inquiry

A change to be expected is from the personal hypotheses of incompetence (negative projective responses) to expressed reactions of competence (positive direct responses). Seven of the eight items yielded chi-square values that were significant at the .001 level.[5] The content of the items dealt with reactions to frustration, reactions to assuming responsibility, attitudes held toward others, feelings of optimism-pessimism, and degree of independence-dependence. Thus, for seven of the eight items the responses shifted from negative, self-devaluating statements on the projective questionnaire to positive, self-enhancing

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[1]Numbers 1, 2, 8, 9, 10.

[2]Numbers 3, 6, 7.

[3]Number 5.

[4]Number 4.

[5]Numbers 1, 2, 3, 4, 5, 6, 8.

statements on the direct questionnaire. The hypothesized relationship was confirmed by the results.

Religious Tolerance and Attitudes Toward Parents as the Object of Inquiry

A discrepancy was hypothesized between projective and direct responses involving the expression of positive or negative attitudes toward parents and religious tolerance. Results indicated that the differences between personal hypotheses and expressed reactions were statistically significant ($p = .001$) for each of the four items. That is to say, there were significant shifts occurring in the responses of all four items that dealt with the categories of attitudes toward parents and religious tolerance. The changes in responses were in the predicted direction of negative responses on the projective questionnaire to positive responses on the direct questionnaire. Once again, the results confirmed the hypothesized relationship between personal hypotheses and expressed reactions in relationship to socially conflicted objects of inquiry.

Reliability of Scoring

The problem of inconsistent scoring has been cited as a serious weakness in the employment of projective techniques. Previous investigations that employed the paired, direct-projective sentence completion technique have reported interscorer reliabilities in the mid and upper nineties.[1] These correlations reflect excellent consistency in the scoring of the PDPQ.

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[1]Getzels, op. cit., p. 163; Getzels and Walsh, op. cit., p. 5.

Theoretical Assumptions Underlying the Proposed Test Instrument

The assumptions underlying the development of the PDPQ stem from models developed in the areas of perception and personality dynamics. Bruner stated that perception takes place within a "tuned organism."[1] The individual is always, to varying degrees of strength, prepared for seeing, hearing, smelling, or tasting some particular thing or class of things. The second step in the perceiving process is the input of information from the environment. The third step is the checking or confirming procedure. Input information is congruous with the operative hypothesis or it is, in varying degrees, incongruous. If confirmation does not occur, the hypothesis shifts in a direction partly determined by internal factors and partly by the unsuccessful information-checking cycle.

The crucial concept of Bruner's viewpoint is the intervening variable, the personal hypothesis. The hypothesis, said Bruner:

> . . . may be regarded as a highly generalized state of readiness to respond selectively to classes of events in the environment. . . . The selectivity of remembering, problem solving, perceiving, imagining, in so far as they show a unity or consistency at a given time, are, in this formulation, assumed to be governed jointly by the intervening variable, the hypothesis.[2]

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[1]Jerome S. Bruner, "Personality Dynamics and the Process of Perceiving," Ch. 5 of Perception: An Approach to Personality, ed. Robert R. Blake and Glenn V. Ramsey (New York: The Ronald Press Company, 1951), pp. 123-124.

[2]Ibid., pp. 125-126.

At any given moment, there is a continuum of responses, and the real attributes of a stimulus will, in effect, be altered by the personal hypothesis.

Getzel discussed Bruner's analysis of perception in relation to the question-answer process. In the area of perception, he noted, emphasis has been placed on responses to visual stimuli, while the process of responding to verbal stimuli has been largely neglected: "It is readily demonstrable that answers to certain kinds . . . perhaps most kinds of questions are no 'plainer' than are perceptions of certain kinds of visual stimuli."[1] In applying Bruner's analysis of the perceptual cycle to the question-answer process, Getzel summarized the process in the following manner:

1. The arousal by the question stimulus of a previously established personal hypothesis, i.e., internal responses, as a reaction to the object of inquiry.
2. The assimilation of the question-stimulus to the total situational context of the question and the checking of the personal hypothesis against the requirements of the situation.
3. The formulating of a verbal response to the question that will facilitate or at least not threaten the respondent's adjustment in light of the personal needs relative to situational demands.

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[1]Jacob W. Getzels, "The Question-Answer Process: A Conceptualization and Some Derived Hypotheses for Empirical Examination," Public Opinion Quarterly, XVIII (1954), 81.

Schematically, Getzel represented the process by the following example:[1]

Therapeutic Interview (Question Stimulus)	Polling Interview (Question Stimulus)	Employment Interview (Question Stimulus)
"How do you like meeting strangers?"	"How do you like meeting strangers?"	"How do you like meeting strangers?"
Personal Hypothesis (Internal Response)	**Personal Hypothesis (Internal Response)**	**Personal Hypothesis (Internal Response**
"Strangers make me feel nervous and inferior."	"Strangers make me feel nervous and inferior."	"Strangers make me feel nervous and inferior."
Situational Context	**Situational Context**	**Situational Context**
Permissive, no value judgment anticipated.	Challenging, the questioner obviously has no difficulty meeting strangers.	Self-interested. Value judgments will be made.
Verbalization (Expressed Response)	**Verbalization (Expressed Response)**	**Verbalization (Expressed Response)**
"Strangers make me feel nervous and inferior."	"Depends on the strangers."	"Strangers are all right. I enjoy meeting them."

Getzel's findings lend support to the theoretical assumptions underlying the PDPQ as an instrument that effectively measures public and private levels of reaction. The evidence to date offers support for the notion that individuals tend to react in light of their definition of the social context.

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[1] Ibid., pp. 84-89.

Summary and Conclusions

Studies of attitudes toward the handicapped have focused primarily on direct assessment techniques emphasizing conscious, verbalized reports of the respondents. Minor attention has been devoted to the projective assessment of covert attitudes held toward the handicapped. To the writer's knowledge, no studies have been undertaken that attempted to measure both covert and overt attitudes toward the handicapped. Based on this review, the following conclusions seem justified:

1. Both direct and projective techniques should be employed.
2. The measurement approach should facilitate a comparison of both direct and projective responses to the same object of inquiry, especially in studies directed toward the assessment of social attitudes toward the handicapped.

The PDPQ demonstrates potential in effectively measuring overt and covert attitudes toward the handicapped, as well as facilitating a comparison of both direct and projective responses to the same object of inquiry. The PDPQ seemed well suited to fulfilling the above needs and was employed in this investigation.

CHAPTER IV

INSTRUMENTS, PROCEDURES, GROUPS, AND HYPOTHESES

Development of Testing Instrument

Rationale

Form I ("The G. and S. Verbal Intelligence Speed Test") is a projective test. The instrument measures covert attitudes toward the Negro, physical disability (blindness, stuttering, cerebral palsy), and self-competence. The projective quality of the test is provided for in two ways. First, the purpose of the test is disguised by identifying it as a "Verbal Intelligence Speed Test." Written and oral instructions emphasize the need to complete each incomplete sentence as quickly as possible. Subjects are told that their mark depends upon completing all of the sentences as quickly and legibly as possible. Second, the items for the test employ third-person instead of the more obviously biased first-person references. Example: "When Bob saw he was getting a blind teacher, he _____." In addition, filler items are interspersed with the test items to further disguise the purpose of the test.

Approximately two weeks after the "test," Form II ("The Personal and Social Attitudes Record") is administered. The purpose of this instrument is to measure overt attitudes toward the Negro, physical disability (blindness, stuttering, cerebral palsy), and self-competence.

The subjects are told the true purpose of the test administration. The test as "an official measure of their personal and social attitudes" is emphasized. The subjects are told also that their scores will be placed on file in the records office. No emphasis is placed on speed. The subjects are directed to complete the items as they apply to themselves, and first-person pronouns are employed for all test items. Example: "When I saw that I was getting a blind teacher, I _____ _____."

Filler items are also included in Form II.

Scoring: General Procedures

The sentence completion test lends itself to both qualitative and quantitative scoring procedures. In this investigation only a quantitative treatment of the data was undertaken. Positive (socially acceptable) responses were scored 0. Negative (socially unacceptable) responses were scored 1. Thus, high score totals reflected negative attitudes, while low score totals reflected positive attitudes. The basic score unit was the negative response. Three score-measures were employed. The first two measures were the subject's respective totals of negative responses on the projective and direct instruments. The third measure was the proportion of negative responses to the projective test reversed to non-negative responses on the direct test, thus providing a measure of the discrepancy between the personal hypotheses and the expressed reactions.

Item Construction and Scoring Principles

Items were constructed with the intent of facilitating a dichotomous classification of responses into positive and negative categories,

Scoring guides were developed to aid in the consistent scoring of responses.[1] Several examples follow to give an illustration of the kinds of responses elicited by the test items.

"11. When a stutterer came to the party, Joe . . .

Positive	Negative
Made him feel at home.	Made fun of him.
Let him in.	Laughed.
Talked to him.	Felt sorry.
Greeted him.	Left.
Said 'So what!'	Shied away from him.
Showed him around.	Mocked him.
Said hello.	Mimicked him.
Treated him the same.	Went home.
Didn't notice he stuttered.	Got angry.
Put him at ease.	Was stunned."

"18. If Donna heard a public speaker begin to stutter, she . . .

Positive	Negative
Listened.	Felt uncomfortable.
Would do nothing.	Became nervous.
Would listen.	Became uneasy.
Listened patiently.	Became apprehensive.
Would think he was nervous.	Felt embarrassed.
Would overlook it.	Shut the speaker out.
Disregarded it.	Would leave.
Listened attentively.	Laughed.
Felt his predicament.	Would look sad.
Tried to ignore it.	Did not want to stay."

"35. When a cerebral palsied student called Marion up for help with the homework, Marion . . .

Positive	Negative
Invited him over.	Refused.
Was helpful.	Hung up.
Gave the answers.	Ignored the call.

[1]See Appendix for copies of Scoring Guides.

Was willing to help.	Said she was busy.
Was happy.	Answered in a mad tone.
Offered any time.	Did not go.
Went to his house.	Became nervous.
Said okay.	Almost laughed.
Helped.	Told him to call someone else.
Offered to come over.	Was worried."

"16. If a blind person was introduced to Irma, she . . .

Positive	Negative
Would say 'hello.'	Felt uncomfortable.
Would talk to him.	Blushed.
Spoke distinctly.	Stammered.
Acted the same.	Felt bad.
Placed her hand in his.	Felt sorry for him.
Was nice.	Tried to hide her nervousness.
Shook hands.	Felt embarrassed.
Would be friendly.	Was careful not to offend.
Thought nothing of it.	Felt scared.
	Didn't know what to do."

"24. If they put a blind person to work next to Charlotte, she . . .

Positive	Negative
Would aid him.	Quit.
Would be friendly.	Was unhappy.
Helped him.	Was worried.
Made friends.	Became angry.
Would continue working.	Worried about her job.
Helped if needed.	Felt uneasy.
Was polite.	Felt sorry for him.
Introduced herself.	Felt insulted.
Said 'hello.'	Threatened to quit.
Was helpful.	Worried about her job."

"44. If the boss began hiring cerebral palsied workers where Bruce worked, Bruce . . .

Positive	Negative
Continued working.	Would quit.
Wouldn't care.	Thought the boss was soft.
Welcomed them.	Got angry.
Tried to help out.	Became annoyed.

Helped them get acquainted.
Did not object.
Made new friends.
Accepted it.
Said okay.
Read about cerebral palsy.
Thought nothing of it.
Kept working.
Stayed on the job.
Would be out of a job.
Might quit.
Would give notice.
Would feel more superior.
Became nervous.
Thought he would be fired.
Disliked it.
Avoided them.
Found a new job."

The number of nonclassifiable responses accounted for an insignificant portion of the total responses. No difficulty was encountered in scoring responses into either a positive or negative category.

In constructing the items, care was taken to avoid affect-laden words that might bias the nature of the subject's responses. Thus, words like "good," "bad," "angry," "sad,"--words that might elicit positive or negative uniformity of responses--were excluded.

Finally, an attempt was made to select and develop items that adequately sampled social and behavioral situations purported to reflect differences in attitudes toward disabilities. Relevant research, personal reports of investigators, autobiographical commentary from handicapped individuals, and the chief investigator's own experiences were the sources of the test items.

Reliability of the Test Instrument

Difficulties in consistent and objective scoring have frequently been cited as a serious problem associated with the use of projective measures. Anastasi commented:

> . . . Many current projective techniques leave much to the subjective interpretation of the scorer, who is also usually the examiner. With such well-known instruments as the Rorschach

> Inkblot Test, for example, the lack of consistency sometimes found between the diagnoses reached from the same records by different experienced scorers is truly astounding. When specific response categories are compared, the degree of scorer reliability is much higher but still falls short of perfect reliability. In the case of such tests, there appears to be fully as much need for a coefficient of scorer reliability as for the usual coefficients of stability or equivalence.[1]

Kerlinger reached the same conclusion as Anastasi: "Projectives, on the other hand, lack this very desirable characteristic: Different observers can score the same data quite differently."[2] It is apparent that any investigator who employs projective measures should also include a statement on scorer reliability.

In the main investigation, a random sample of six pairs of direct-projective questionnaires was selected from the Graduate Student Speech Therapy Group. The twelve questionnaires were scored by the chief investigator and rescored independently by a clinical psychologist.[3] Out of a total of 288 items on Form I, the results indicated agreement on 277 items. Out of a total of 288 items on Form II, the results indicated agreement on 281 items.

Validity of the Physical Disability Scale

An attempt was made to select and develop items that adequately sampled social and behavioral situations purported to reflect differences

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[1]Anne Anastasi, Psychological Testing (New York: The Macmillan Company, 1954), p. 101.

[2]Fred N. Kerlinger, Foundations of Behavioral Research; Educational and Psychological Inquiry (New York: Holt, Rinehart & Winston, Inc., 1964), p. 526.

[3]Albert T. Murphy, Professor of Speech Pathology at Boston University.

in attitudes toward disabilities. Content of the disability items focused on the general factors of social distance, beliefs about capabilities, and intelligence. Within this framework the following categories were included: entry into vocational settings; participation in social clubs; entrance into classroom and school settings; assumed limitations caused by particular disabilities; acceptance of the handicapped person as a family member; and reactions to behavior associated with a particular disability.

The initial item-pool contained sixty-one incomplete sentence stubs.[1] Inspection of the items satisfies the criterion of face validity; e.g., they manifestly appear to deal with the subject of attitudes toward disabilities. Face validity is an exceedingly tenuous basis on which to support the validity of a test instrument. Content validity was established by employing two qualified judges,[2] who independently rated each item. The judges were provided with a manual that explained the theoretical and methodological principles that were to be utilized for the investigation. The judges were asked to determine whether each item was potentially capable of measuring a positive or negative attitude toward the handicapped groups under investigation. The judges were provided with three response categories: "Yes," "No," and "I don't

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[1]See the Appendix for copies of the initial item-pools.

[2]Albert T. Murphy, Professor of Speech Pathology at Boston University. He has had intensive experience and background in projective psychology in addition to extensive contact with exceptional children and adults.

Bernard Phillips, Professor in the Department of Sociology at Boston University. He has conducted survey investigations in various areas of attitude research.

know." Both judges indicated that all items appeared potentially capable of measuring a positive or negative attitude toward the handicapped groups being investigated.

Derivation of Social Status Rank

For this investigation a measure of the subjects' social-status position was required. Warner, Meeker, and Eells have investigated the following factors that relate to an individual's social-class rank: (1) occupation; (2) source of income; (3) house type; and (4) dwelling area.[1] In the present investigation it was not possible to secure information on the above characteristics. Instead, a single-item, occupational index of social-status position was employed to rank subjects into socio-economic categories.[2] The occupational ratings were assigned to the following socio-economic categories:

Occupation Rating		Socio-economic Category
1. One	=	upper class
2. Two and three	=	middle class
3. Four, five, six, and seven	=	lower class

Justification for this classification is based on data supplied by Warner. He indicated that out of 110 people classified in the first three occupational categories, 109 were situated in the middle or upper class; 69 out of 98 people classified in occupational categories four through seven were in the lower class.[3] For purposes of this investiga-

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[1]Lloyd Warner, Marcia Meeker, and Kenneth Eells, Social Class in America (New York: Science Research Associates, Inc., 1956).

[2]Ibid., pp. 140-141. [3]Ibid., p. 165.

tion, subjects were grouped into three categories that are, within the limitations noted, representative of upper, middle, and lower socio-economic categories.

Pilot Study

Background

The initial research plan called for studying all tenth and twelfth grade students in one public school.[1] The public school was to fulfill the following criteria: (1) A varied distribution in relation to ethnic composition and occupational categories; (2) the presence of business and industry combined with a residential base; and (3) a city that has characteristics that other cities also possess, i.e., the overall set of characteristics that identify this particular city are not infrequently found in other cities throughout the country.

In preliminary discussions with Professor Frank Sweetser,[2] he indicated that Watertown, Massachusetts fulfilled the criteria. He noted that the city of Watertown was often studied because of its similarity to other cities regarding ethnic composition, income level, and occupational distribution.[3]

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[1]An alternative plan was instituted after failure to obtain project clearance from 23 school systems. See the Appendix for a summary of the communities that were contacted, as well as a resume of the difficulties encountered.

[2]Professor Sweetser, from the Department of Sociology of Boston University, has been engaged in extensive demographic investigation of the Metropolitan Boston area.

[3]Watertown is a suburban community of 39,092 people, located approximately seven miles northwest of Boston, and three miles west of Harvard Square, Cambridge. It is a residential and industrial town, the

The original intent was to contact the Watertown Public High School for permission to conduct the main investigation. The headmaster, Mr. John Kelley, indicated that all requests for testing programs were initially screened by Mr. Edward B. Colbert, Guidance Director. Mr. Colbert was contacted regarding the project and a meeting was arranged. Prior to the meeting the investigator sent copies of the test scales and an information sheet outlining the project.[1]

At the meeting Mr. Colbert expressed interest in the project. Unfortunately, however, the demands of the academic program, as well as the involvement of the high school in other research projects, made it impossible for the school to participate in the project. The investigator was granted permission to test three study hall classes. Originally, the pilot study was to have been conducted at Boston University. Since the major research focus was directed at the high school population, it was decided to employ a high school setting for the pilot study.

School and Test Group Characteristics

Watertown High School is a comprehensive three-year senior high school with an enrollment on October 1, 1963, of 1,356, including 427 in Grade 10, 500 in Grade 11, and 429 in Grade 12. The school offers two college preparatory curricula (an honors and a regular college prepara-

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home of Watertown Arsenal, B. F. Goodrich, and Western Electric plants, and other industries. According to the United States 1960 Census, the adult population is engaged in all types of business, professional, semi-professional, skilled, and unskilled occupations.

[1]See the Appendix. A second edition of the information sheet was subsequently developed.

tory curriculum), two vocational curricula (Business and Industrial Arts), and a general curriculum. According to statistics compiled by the school system, approximately 50 per cent of the graduates continue their education.

Three successive study hall groups were tested. Group A received the projective questionnaire containing nineteen items dealing with the blind. Group B received the projective questionnaire containing twenty-one items dealing with the stutterer. Group C also received the projective questionnaire containing twenty-one items dealing with the stutterer.[1] No items dealing with the Negro or with self-competence were included in the initial questionnaire.

Group A contained 55 subjects, 17 males and 38 females. Nine subjects were in Grade 10, 23 in Grade 11, and 23 subjects were in Grade 12. Student majors included 27 subjects in a college course, 27 in business or industrial arts, and one student in a general curriculum.

Group B comprised 51 subjects, 32 males and 19 females. Sixteen subjects were in Grade 10, 16 subjects were in Grade 11, and 19 subjects were in Grade 12. Student majors included ten subjects in the college course, 35 subjects in business or industrial arts, and six subjects in the general curriculum.

Group C comprised 58 subjects, 36 males and 22 females. Twenty-four subjects were in Grade 10, 15 subjects were in Grade 11, and 19 were in Grade 12. Student majors included 35 subjects in college arts, 20 subjects in business or industrial arts, and three in the general curriculum.

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[1]See the Appendix for copies of pilot study questionnaires.

Testing Environment

The mode of test administration was significantly altered for the pretest. In addition to receiving the standard directions, the subjects were told that Boston University was in the process of developing "a different kind of intelligence test." The testees were informed that the present test administration was part of an experiment to determine the relative value of the test. Subjects were also told that it was not necessary to sign their names to the form, although background information regarding age, sex, and curriculum major was requested. As an incentive to further the goals of the test situation, the investigator told the testees that if they signed their names, he would send a copy of the test results to each of these individuals. Approximately 60 per cent of the subjects voluntarily signed their names.

The testing environment presented two problems. First, the subjects employed lapboards, which appeared to cause difficulty for some of the testees. Apparently, the use of lapboards was a familiar procedure to the students, since no complaints were made. Second, the subjects were unprepared for the test. Momentary surprise was registered by most subjects, but they appeared to accept the novelty of the task with no obvious signs of resistance. The duration of testing averaged 35 minutes for each group. This included the administration of test forms and lapboards.

Due to the nature of the groups tested, the marked shifts in test administration directions, and the large proportion of specific disability items in each projective questionnaire, it was decided to

forego any formal analyses of responses. Inspection of test items quickly disclosed the items that were poorly worded and/or did not lend themselves to a dichotomy of negative and positive response categories. Each ten-item disability scale for the final test measure was thus derived from the three item-pools employed in the pretest. Minor changes in item spacing and items per page were also instituted as a result of the pilot study.

Instruments and Procedures Employed in the Main Investigation

Test Instruments

Section 1 reported on the rationale, item construction, scoring procedures, reliability, and validity of the projective and direct questionnaires. Both the "G. and S. Verbal Speed Intelligence Test" and the "Personal and Social Attitudes Record" contained a total of 63 items consisting of 49 test items and 14 filler items. The five scales will be presented here with their appropriate item numbers. Only the scales utilized for male subjects will be illustrated. Copies of the questionnaires employed for males and females are in the Appendix.

(1a) Stuttering Scale--Projective Questionnaire--Form I

Number	Item
11.	When a stutterer came to the party, Joe . . .
18.	If Hank heard a public speaker begin to stutter, he . . .
22.	When Ben heard his new teacher begin to stutter, he . . .
25.	If Harry found out that his blind date stuttered, he . . .
31.	When a stutterer tried out for the drama club, Ralph . . .

Number	Item
36.	When the saleslady began to stutter as she answered Barney's question about cost, Barney . . .
37.	If Nick had to choose between voting for someone who stuttered or someone who didn't, he . . .
46.	When a stutterer applied for membership in the debate club, Leo . . .
53.	If Kurt had to choose between doing the homework assignment with someone who stuttered, or someone who didn't, he . . .
57.	If Pete's sister decided to marry a stutterer, Pete . . .

(1b) Stuttering Scale--Direct Questionnaire--Form II

Number	Item
11.	When a stutterer came to the party, I . . .
18.	If I heard a public speaker begin to stutter, I . . .
22.	When I heard my new teacher begin to stutter, I . . .
25.	If I found out that my blind date stuttered, I . . .
31.	When a stutterer tried out for the drama club, I . . .
36.	When the saleslady began to stutter as she answered my question about cost, I . . .
37.	If I had to choose between voting for someone who stuttered or someone who didn't, I . . .
46.	When a stutterer applied for membership in the debate club, I . . .
53.	If I had to choose between doing the homework assignment with someone who stuttered or someone who didn't, I . . .
57.	If my sister decided to marry someone who stuttered, I . . .

(2a) Blindness Scale--Projective Questionnaire--Form I

Number	Item
8.	When Mike heard that a blind person wanted to come to his school, he . . .
12.	If George had to choose between going to a school that had blind students in it, or one that didn't have blind students, he . . .
16.	If a blind person was introduced to Arnie, he . . .
24.	If they put a blind person to work next to Tony, he . . .
30.	When Henry saw a blind student in his class, he . . .
40.	When Jerry heard that a blind person had applied for membership in the swimming club, he . . .
45.	When Albert heard that his friend had stopped going out with the blind girl, he . . .
50.	When Sam saw the teacher he was getting was blind, he . . .
58.	When a blind student called Edward up for help with the homework, Edward . . .
62.	If Norman's sister decided to marry a blind boy, Norman . . .

(2b) Blindness Scale--Direct Questionnaire--Form II

Number	Item
8.	When I heard that a blind person wanted to come to my school, I . . .
12.	If I had to choose between going to a school that had blind students in it, or one that didn't have blind students, I . . .
16.	If a blind person was introduced to me, I . . .
24.	If they put a blind person to work next to me, I . . .
30.	When I saw a blind student in my class, I . . .
40.	When I heard that a blind person had applied for membership in the swimming club, I . . .

Number	Item
45.	When I heard that my friend had stopped going out with the blind girl, I . . .
50.	When I saw the teacher I was getting was blind, I . . .
58.	When a blind student called me up for help with the homework, I . . .
62.	If my sister decided to marry a blind boy, I . . .

(3a) Cerebral Palsy Scale--Projective Questionnaire--Form I

Number	Item
4.	If Dick heard that a cerebral palsied student wanted to come into his class, he . . .
21.	When Roger told Don that he thought cerebral palsied students should go to their own school, Don . . .
27.	When Bruno had to choose between a cerebral palsied job applicant and one that wasn't cerebral palsied, he . . .
35.	When a cerebral palsied student called Andy up for help with the homework, Andy . . .
39.	When Charlie heard that a cerebral palsied person wanted to join his club, he . . .
44.	If the boss began hiring cerebral palsied workers where Bruce worked, Bruce . . .
47.	If Jay found out that a cerebral palsied student was applying to the same school as he was, he . . .
54.	If Vance found out that a cerebral palsied person had applied for the same job that he wanted, he . . .
60.	If Sol saw a cerebral palsied person drool while she was talking, he . . .

(3b) Cerebral Palsy Scale--Direct Questionnaire--Form II

Number	Item
4.	If I heard that a cerebral palsied student wanted to come into my class, I . . .
21.	When Roger told me that he thought cerebral palsied students should go to their own school, I . . .
27.	When I had to choose between a cerebral palsied job applicant and one that wasn't cerebral palsied, I . . .
35.	When a cerebral palsied student called me up for help with homework, I . . .
39.	When I heard that a cerebral palsied person wanted to join my club, I . . .
44.	If the boss began hiring cerebral palsied workers where I worked, I . . .
47.	If I found out that a cerebral palsied student was applying to the same school as I was, I . . .
54.	If I found out that a cerebral palsied person had applied for the same job that I wanted, I . . .
60.	When I heard that a cerebral palsied student was trying out for the modern dance club, I . . .
62.	If I saw a cerebral palsied person drool while she was talking, I . . .

(4a) Negro Scale--Projective Questionnaire--Form I

Number	Item
6.	When Jack saw Negroes moving in next door, he . . .
9.	When they put a Negro foreman over him, Clint . . .
15.	When Larry discovered the school he was planning to enter was half Negro, he . . .
19.	When Gary saw his younger brother dancing with a Negro, he . . .
26.	When Roger saw the doctor they were trying to give him was a Negro, he . . .

Number	Item
33.	When his favorite barbershop began being used by Negroes, Ted . . .
43.	When Negroes began being admitted to the club, Keith decided . . .
48.	When the boss began hiring many Negroes, Alan . . .
51.	When they put a Negro to work next to him, Dan . . .
55.	When Carl saw a Negro and a white involved in an accident, he naturally blamed the . . .

(4b) Negro Scale--Direct Questionnaire--Form II

Number	Item
6.	When I saw Negroes moving in next door, I . . .
9.	When they put a Negro foreman over me, I . . .
15.	When I discovered the school I was planning to enter was half Negro, I . . .
19.	When I saw my younger brother dancing with a Negro, I (If you don't have a younger brother, answer as if you did) . . .
26.	When I saw the doctor they were trying to give me was a Negro, I . . .
33.	When my favorite barber shop began being used by Negroes, I . . .
43.	When Negroes began being admitted to the club, I decided . . .
48.	When the boss began hiring many Negroes, I . . .
51.	When they put a Negro to work next to me, I . . .
55.	When I see a Negro and a white involved in an accident, I naturally blame the . . .

(5a) Self-Competence Scale--Projective Questionnaire--Form I

Number	Item
1.	Most jobs with responsibility made Ed feel . . .
2.	When Frank thought the job was too much for him, he . . .
5.	When Burt had something to say and others were around, he . . .
13.	When Ken saw others doing better than he, Ken . . .
20.	When told he would have to do the whole thing by himself, Lou . . .
28.	When Mitch thought the odds were against him, he . . .
34.	Working with others all the time made Jake . . .
42.	Every time they didn't invite Eddie to the party, he . . .

(5b) Self-Competence Scale--Direct Questionnaire--Form II

Number	Item
1.	Most jobs with responsibility make me feel . . .
2.	When I think the job is too much for me, I . . .
5.	When I have something to say and others are around, I . . .
13.	When I see others doing better than I . . .
20.	When I am told I have to do the whole thing by myself, I . . .
28.	When I think the odds are against me, I . . .
34.	Working with others all the time makes me . . .
42.	Every time they don't invite me to the party, I . . .

Socially Neutral Object of Inquiry

Item number 7 was employed as a socially neutral item. Getzels has indicated the following requirements for such an item:

(a) The item had to elicit some emotional reaction so that the response would not be detached or casual;
(b) The item had to consist of a free choice between two emotionally loaded objects so that the scoring might be unequivocal;
(c) The objects had to be such that, although emotionally loaded for the respondent, there would be no socially "right" or "wrong" choice--either one would be right; the choice is socially neutral;
(d) On the technical side, the two objects had to consist of the same number of letters since in a free response test where there is an ostensible premium on speed; [sic] the shorter word might be written not because it represented the preferred choice but because it could be written faster.[1]

The item constructed for use in Getzels' study was: "As between mother's and father's ways Liz usually chose . . ." The same item was employed in the present investigation to explore the hypothesized differences in responses between socially conflicted objects of inquiry and socially natural objects of inquiry.

Outline of Testing Procedures

Test forms were distributed to the subjects (male forms for males and female forms for females). The next section contains a description of the specific characteristics of the test groups. Subjects were cautioned not to turn any pages. After the subjects filled in the identifying data, the test administrator read the following instructions to the subjects.

> This is a test of how fast you can think in sentences so that it makes sense. You may use either a word or a phrase, although a phrase is preferable. Since you will have only a limited amount of time, work quickly. In most cases, the best way to

[1]Jacob W. Getzels and J. J. Walsh, "The Method of Paired Direct and Projective Questionnaires in the Study of Attitude Structure and Socialization," Psychological Monographs, LXXII, No. 1 (1958), 8.

> answer the test is to put down the first thing that comes to your mind after you read the beginning of the sentence. Do not worry about spelling, but write as quickly and as legibly as you can. For example, suppose you had to complete a sentence that said, "When Al scored the goal, he _____." You could finish this sentence by writing: "was happy," or "wanted to score another," or "stopped playing and went home," or some other answer that makes sense. Your intelligence score will depend on how fast you are able to complete all of the questions in the test. It is equally important that the answers are readable. As soon as you complete the test, raise your hand so I will be able to mark the time on your test booklet.

The subjects were given an opportunity to ask questions after the test administrator had read the instructions. Subjects were told to begin. During the test, various "hurry-up" devices were employed to maximize the test-taking set of the subjects. Three minutes from the start of the test, the subjects were told that five minutes had passed and they had better be working right along. When the first subjects were seen turning page one, the tester announced that everyone should be finishing the first page. After several students were seen turning the second page, the tester announced that everyone should be well along on the second page. When the first student raised his hand to indicate that he had finished the test, the administrator announced that one student had already finished and that everyone should be on the last page finishing up. As each subject finished his paper, it was collected and the examiner marked the time on the face sheet.

The second questionnaire was administered approximately two weeks later. The test was described to the subjects as "an official measure of their personal and social attitudes." Subjects were allowed as much time as they needed to complete the questionnaires. After the subjects filled

in the identifying data, the test administrator read the following instructions to the subjects:

> The office would like to have in its files a record of your personal and social attitudes--that is, your attitudes toward politics, responsibility, parents, physical handicaps, race prejudice, etc. Complete each of the statements by writing in what best applies in your case. Consider each statement carefully. There is no time limit. What you write in will represent the record of your personal and social attitudes. Do not skip any sentences.

Subjects were given an opportunity to ask questions after the test administrator had read the instructions. Subjects were told to begin. No "hurry-up" devices were employed for the second test.

Rationale for Selecting Test Groups

Six research groups were utilized for the main investigation. An attempt was made to select groups which were sufficiently heterogeneous in their individual characteristics to subject the hypotheses to an adequate evaluation.

Since a paper-and-pencil methodology was employed, testees were required to be proficient in reading and writing skills. Subjects were either in high school or college. According to teaching and supervisory personnel associated with the test groups, no subjects were of below average intelligence.

For purposes of analysis, the six groups were collapsed into two groups. The first group included three subgroups of school-age subjects situated in grades 10 through 12 ($N = 210$). The second group included three subgroups of college subjects ($N = 102$). Specific characteristics of the individual groups will be reported in detail.

Description of College Groups

Boston University Graduate School Speech Therapy Group.-- The first group contained 16 subjects enrolled in a Summer School Graduate Program in Speech Pathology. The majority of the subjects were experienced classroom teachers of deaf children. Form I was administered by the regular classroom instructor. Approximately two weeks later, Form II was administered by the chief investigator. Apparently, the experimental manipulation was only partially successful with this particular group. The instructor reported that some subjects questioned the stated purposes of the test. This may be related to the age and relatively superior test-taking experience level of the first group. In addition, the inclusion of items focusing on disabilities may have served to alert this particular group to the true purpose of the test. In any case, it was decided to include these results within the study, while recognizing the inherent threat to the internal validity of the obtained data.

Boston University Summer School--Introductory Course in Exceptional Children.-- The second group contained 26 subjects enrolled in a Summer School course concerned with the "Nature and Needs of Mentally Retarded Children." The majority of subjects were undergraduate students who were majoring in Special Education. Form I was administered by the regular classroom instructor. Approximately two weeks later, Form II was administered by the classroom instructor. No questions concerning the validity of the stated purposes of the test were raised by the test subjects.

University of Massachusetts Public Speaking Classes.-- The third

Description of College Groups

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Boston University Summer School--Intermediate Course in Exceptional Children.-- The second group contained 26 subjects enrolled in a Summer School course concerned with the "Nature and Needs of Mentally Retarded Children." The majority of subjects were undergraduate students who were majoring in Special Education. Form I was administered by the regular classroom instructor. Approximately two weeks later, Form II was administered by the classroom instructor. No questions concerning the validity of the stated purposes of the test were raised by the test subjects.

University of Massachusetts Public Speaking Classes.-- The third

group contained 60 college freshmen enrolled in a required introductory public speaking course. Four classroom groups were assessed. Form I was administered by the regular classroom instructor. Following an interval of two weeks, Form II was administered. All experimental test conditions were upheld for both testings.

Description of High School Groups

Commonwealth Corps Group.-- The fourth group contained 17 subjects enrolled in the Commonwealth Service Corps. The Commonwealth Corps Program is a state-financed, inservice training program, staffed with volunteers who work with various socially, culturally, and physically disadvantaged groups. A weekly stipend of $20 is granted to the participants in the program. The subjects were participating in an eight-week program at the Walter J. Fernald State School for the Mentally Retarded. Form I and Form II were administered by the regular project director.

Reading Institute--Summer Course Program in Developmental Reading.-- The fifth group consisted of 60 high school students enrolled in a developmental reading course offered at the Reading Institute of Boston. These students were not receiving remedial assistance in reading. All students demonstrated grade level competence in reading and vocabulary. Six groups were evaluated. Some adjustments were necessary in the testing procedure. First, the chief investigator administered the tests rather than the regular classroom instructor. Second, subjects were requested to voluntarily come to class 15 minutes earlier to take the

second test. Although most conditions of the testing environment were satisfied, there is a question regarding the effect of placing the second test on a voluntary basis. This was necessary in order to have enough time available for the subjects to complete the questionnaires.

Vermont Student Council Group.-- The sixth group contained 133 high school students attending a three-day workshop in leadership training. All of the subjects were officers of their respective student councils. Geographically, the subjects represented the states of Maine, New Hampshire, and Vermont.

Form I was administered by the chief investigator and a regular staff member. Two days later, Form II was administered by the same examiners. According to the workshop director, the vast majority of subjects were high school juniors and seniors majoring in a college curriculum. Due to the length of the workshop, it was necessary to administer the second test after a two-day interval rather than the customary two-week period.

Hypotheses Chosen for Investigation

Discussion

The initial hypothesis maintains that a substantial number of individuals hold private attitudes toward socially conflicted objects of inquiry (Negro, self-competence, and the handicapped) that are in sharp contrast to their public attitudes toward the same objects of inquiry. It is expected that a majority of individuals, when tested by a projective, sentence-completion test, will demonstrate responses indic-

ative of negative, prejudicial attitudes. When administered a direct, sentence-completion test that purports to measure ". . . attitudes toward politics, responsibility, parents, physical handicaps, race prejudice, etc." it is expected that a majority of the subjects will respond positively to socially conflicted objects of inquiry. A comparison of direct and projective responses to socially-conflicted objects of inquiry should demonstrate a relatively large discrepancy between the two tests. It is equally important to investigate the conditions under which no change is expected to occur between public and private test responses. It was hypothesized that when subjects are presented with a question that does not contain normative expectations of right and wrong, there should be a minimal discrepancy between public and private attitude responses. Thus, a comparison of direct and projective responses to socially neutral objects of inquiry should demonstrate a relatively small discrepancy between the two tests.

A second set of hypotheses will examine the interrelationship of positive and negative responses between projective and direct sentence-completion tests. Subjects who respond with a positive response on the projective test should not change to negative response on the direct test. For example, if a subject states that he would admit a Negro to his club, it seems unlikely that the same subject would shift to a negative response on the direct test. The hypothesis maintains that subjects who respond positively to socially conflicted objects of inquiry on the projective test will also respond positively on the direct test. Under what conditions would a subject shift his responses between the

projective and direct tests? Individuals who respond with negative responses on the projective test should change to positive responses on the direct test which purports to measure social attitudes. For example, if a portion of the subjects state that they would not admit a Negro to their club, it seems likely that a majority of those subjects would shift to a positive response on the direct test. The hypothesis maintains that a majority of the subjects who respond negatively to socially conflicted objects of inquiry on the projective test will shift to positive responses on the direct test. It is not assumed that all of the responses to socially conflicted objects of inquiry will be positive on the direct test. There may be a small minority of subjects who defy social expectation and respond negatively to socially conflicted objects of inquiry on the direct test. Under these conditions it is anticipated that the projective test responses will also be negative.

The third set of hypotheses will analyze the distribution of negative responses on the projective and direct tests. A distribution of negative responses to each of the socially conflicted objects of inquiry on the projective test should approximate a normal curve, i.e., negative scale totals should result in a range of scores indicative of individual differences, with a concentration of scores occurring around a central value. Conversely, a distribution of negative responses to each of the socially conflicted objects of inquiry on the direct test should approximate a J curve. A majority of the subjects should respond with low, negative score totals that are concentrated at one end of the frequency distribution.

The previous discussion dealt with the rationale and expected outcomes of responses to socially conflicted and socially neutral objects of inquiry. In addition, a major focus was placed on analyzing the expected differences between projective and direct test responses to the same object of inquiry. It is also important to investigate the influence of sex, age, and social status in relation to attitudes toward socially conflicted objects of inquiry. Previous research discloses contradictory findings regarding the influence of sex and age in relation to attitudes toward the handicapped. To date, the influence of social status on attitudes toward disabilities has received minor attention. These three dimensions will be analyzed in relation to private attitude responses toward socially conflicted objects of inquiry.

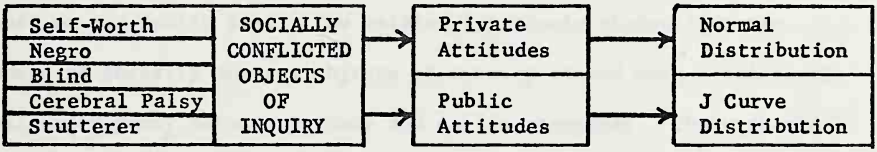
Hypotheses to Be Examined

A. Major Hypotheses

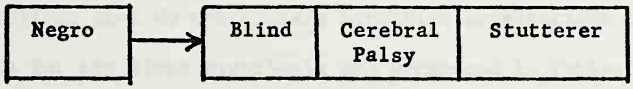
Object of Inquiry	Anticipated Directional Relationships		Percentage of Change
	Test 1	Test 2	
Socially Conflicted	—	→ +	High
	— ←	— —	
	+	→ +	
Socially Neutral	+	→ +	Low
	—	→ —	

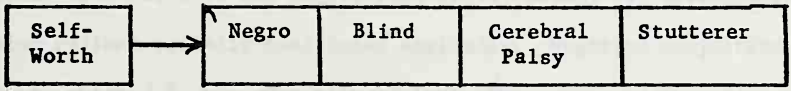
B. Secondary Hypotheses

(1) Distributions

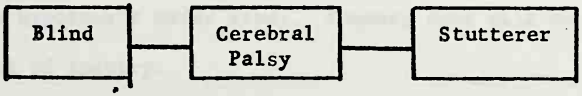


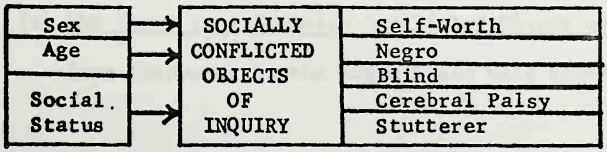
(2) Positive Relationships (Private Attitudes)





(3) Significant Differences (Private Attitudes)





CHAPTER V

RESULTS AND DISCUSSION

Presentation and Analysis of Data

Hypothesis I

The initial hypothesis maintained that responses to socially-conflicted objects of inquiry should have a relatively large discrepancy between private and public questionnaire responses. Subjects who respond negatively on the projective test should shift to a positive response on the public test. The related hypothesis stated that responses to socially neutral objects of inquiry should have a relatively small discrepancy between private and public responses. There should be minimal shifts occurring between public and private test responses to questions that do not contain normative expectations of right and wrong. Data for the first hypothesis are presented in Tables 1 through 20. The results indicate that the Negro, Self-Worth, Blind, and Cerebral Palsied scales reflect socially-conflicted attitudes. Negative projective responses shifted in the direction of normative social expectations on the direct (second) test. Responses to the Stutterer Scale did not support the hypothesis under study. Summary data will be presented for each object of inquiry.

(a) The Negro as a Socially Conflicted Object of Inquiry

Item responses to the Negro Scale were significant beyond the

.001 level for nine of ten items. Seventy-four per cent of the negative responses on the projective test became positive on the direct test. A second method of analysis involved comparing the respective numbers of negative responses on the projective and direct tests. There were 1,476 negative responses on the projective test compared to 513 negative responses on the direct test. The data support the hypothesis that the Negro is a socially-conflicted object of inquiry.

(b) Self-Worth as a Socially Conflicted Object of Inquiry

Item responses to the Self-Worth scale were significant for seven of eight items in the predicted direction.[1] P values were significant beyond the .001 level for seven of the items. Seventy-four per cent of the negative, projective responses were changed to positive responses on the direct test. There were 1,251 negative responses on the projective test compared to 428 negative responses on the direct test. The data support the hypothesis that Self-Worth is a socially-conflicted object of inquiry.

(c) The Blind as a Socially Conflicted Object of Inquiry

Item responses were statistically significant for nine of ten items on the Blind scale. Eight of the items were significant beyond the .001 level. Sixty-nine per cent of the negative, projective responses were changed to positive responses on the direct test. There were 968 negative responses on the projective test compared to 487 negative responses on the direct test. The data support the hypothesis that the Blind are socially-conflicted objects of inquiry.

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[1]One item was significant in a direction contrary to the hypothesized expectation. Individual item responses will be discussed in a separate section.

(d) The Cerebral Palsied as an Object of Inquiry

Item responses were statistically significant in the predicted direction for eight of ten items on the Cerebral Palsy scale. Seven of the eight P values were significant beyond the .001 level. Sixty-five per cent of the negative, projective responses were changed to positive responses on the direct test. There were 1,051 negative responses on the projective test compared to 559 negative responses on the direct test. The data support the hypothesis that the Cerebral Palsied are socially-conflicted objects of inquiry.

(e) The Stutterer as a Socially Conflicted Object of Inquiry

Analysis of responses failed to support the hypothesis that the stutterer is a socially-conflicted object of inquiry. For the combined group, five of ten items were statistically significant in the predicted direction. Two items were significant in a direction contrary to the hypothesized expectation. The remaining three items were nonsignificant. In contrast to the previous scales, only 55 per cent of the negative, projective responses were changed to positive responses on the direct test. On the projective test, there was a total of 1,580 negative responses. On the direct test, there were 957 negative responses, or approximately 61 per cent of the total number of negative, projective responses. These inconsistent findings will be discussed in a separate section.

The following tables contain the relevant data for the initial hypothesis.

TABLE 1

FREQUENCIES OF NEGATIVE PROJECTIVE AND DIRECT RESPONSES TO TEN ITEMS CONCERNING THE NEGRO, WITH CHI SQUARE AND P VALUES FOR DIFFERENCES
(Total Group: N = 312)

Object of Inquiry	f Projective Negative Responses	f Direct Negative Responses	χ^2	P
6. Residing next to Negro	142	38	30.67	.001
9. Having Negro supervisor	174	33	67.03	.001
15. Going to school with Negroes	132	39	22.09	.001
19. Dancing with a Negro	200	90	2.00	
26. Having a Negro doctor	143	39	29.54	.001
33. Using a Negro barber shop	122	26	40.16	.001
43. Admitting Negroes to club	157	35	48.21	.001
48. Hiring many Negroes	144	37	34.02	.001
51. Working next to Negroes	87	7	61.25	.001
55. Negro in accident	175	34	65.42	.001
Total	1476	378		

TABLE 2

FREQUENCIES OF NEGATIVE PROJECTIVE AND DIRECT RESPONSES TO TEN ITEMS CONCERNING THE NEGRO, WITH CHI SQUARE AND P VALUES FOR DIFFERENCES
(College Group: N = 102)

Object of Inquiry	f Projective Negative Responses	f Direct Negative Responses	χ^2	P
6. Residing next to Negro	51	16	7.07	.001
9. Having Negro supervisor	56	11	20.64	.001
15. Going to school with Negroes	45	13	8.02	.001
19. Dancing with a Negro	66	37	.96	
26. Having a Negro doctor	43	14	5.23	.02
33. Using a Negro barber shop	38	8	12.73	.001
43. Admitting Negroes to club	51	8	24.01	.001
48. Hiring many Negroes	47	11	13.29	.001
51. Working next to Negroes	29	2	21.55	.001
55. Negro in accident	51	7	26.84	.001
Total	477	127		

TABLE 3

FREQUENCIES OF NEGATIVE PROJECTIVE AND DIRECT RESPONSES TO TEN ITEMS CONCERNING THE NEGRO, WITH CHI SQUARE AND P VALUES FOR DIFFERENCES (High School Group: N = 210)

Object of Inquiry	f Projective Negative Responses	f Direct Negative Responses	χ^2	P
6. Residing next to Negro	91	22	24.27	.001
9. Having Negro supervisor	118	22	46.40	.001
15. Going to school with Negroes	87	26	14.08	.001
19. Dancing with a Negro	134	53	5.85	.01
26. Having a Negro doctor	100	25	25.00	.001
33. Using a Negro barber shop	84	18	27.42	.001
43. Admitting Negroes to club	106	27	25.50	.001
48. Hiring many Negroes	97	26	20.87	.001
51. Working next to Negroes	58	5	39.72	.001
55. Negro in accident	124	27	39.51	.001
Total	999	251		

TABLE 4

SUMMARY OF CHI SQUARE AND P VALUES FOR DIFFERENCES BETWEEN NEGATIVE PROJECTIVE AND DIRECT RESPONSES TO SOCIALLY CONFLICTED OBJECTS OF INQUIRY

Item No.	Object of Inquiry Negro	Collge Group (N=102)		High School Group (N=210)		Total Group (N=312)	
		χ^2	P	χ^2	P	χ^2	P
6.	Residing next to Negro	7.07	.001	24.27	.001	30.67	.001
9.	Having Negro supervisor	20.64	.001	46.40	.001	67.03	.001
15.	Going to school with Negroes	8.02	.001	14.08	.001	22.09	.001
19.	Dancing with a Negro	.96	--	5.85	.01	2.00	--
26.	Having a Negro doctor	5.23	.02	25.00	.001	29.54	.001
33.	Using Negro barber shop	12.73	.001	27.42	.001	40.16	.001
43.	Admitting Negroes to club	24.01	.001	25.50	.001	48.21	.001
48.	Hiring many Negroes	13.29	.001	20.87	.001	34.02	.001
51.	Working next to Negroes	21.55	.001	39.72	.001	61.25	.001
55.	Negro in accident	26.84	.001	39.51	.001	65.42	.001

TABLE 5

FREQUENCIES OF NEGATIVE PROJECTIVE AND DIRECT RESPONSES TO EIGHT ITEMS CONCERNING SELF-WORTH, WITH CHI SQUARE AND P VALUES FOR DIFFERENCES
(Total Group: N = 312)

Object of Inquiry	f Projective Negative Responses	f Direct Negative Responses	χ^2	P
1. Jobs with responsibility	128	11	87.78	.001
2. Thought job too much	266	44	119.11	.001
5. Others are around	118	23	43.93	.001
13. Others doing better	94	10	58.25	.001
20. Do whole thing by oneself	180	35	67.22	.001
28. Odds are against one	132	35	29.12	.001
34. Working with others	63	17	13.34	.001
42. Not invited to party	270	152	4.28	.05*
Total	1251	327		

*Significant in opposite direction stated by hypothesis. Two-tail test of significance employed.

TABLE 6

FREQUENCIES OF NEGATIVE PROJECTIVE AND DIRECT RESPONSES TO EIGHT ITEMS CONCERNING SELF-WORTH, WITH CHI SQUARE AND P VALUES FOR DIFFERENCES
(College Group: N = 102)

Object of Inquiry	f Projective Negative Responses	f Direct Negative Responses	χ^2	P
1. Jobs with responsibility	47	4	32.36	.001
2. Thought job too much	86	21	22.51	.001
5. Others are around	32	1	29.03	.001
13. Others doing better	35	5	17.85	.001
20. Do whole thing by oneself	52	10	19.69	.001
28. Odds are against one	49	17	4.59	.02
34. Working with others	25	9	1.96	--
42. Not invited to party	86	38	1.16	--
Total	412	105		

TABLE 7

FREQUENCIES OF NEGATIVE PROJECTIVE AND DIRECT RESPONSES TO EIGHT ITEMS CONCERNING SELF-WORTH, WITH CHI SQUARE AND P VALUES FOR DIFFERENCES (High School Group: N = 210)

Object of Inquiry	f Projective Negative Responses	f Direct Negative Responses	χ^2	P
1. Jobs with responsibility	81	7	55.41	.001
2. Thought job too much	180	23	99.75	.001
5. Others are around	86	22	20.51	.001
13. Others doing better	59	5	40.69	.001
20. Do whole thing by oneself	128	25	47.53	.001
28. Odds are against one	83	18	26.61	.001
34. Working with others	38	8	12.73	.001
42. Not invited to party	184	114	10.52	.01*
Total	839	222		.

*Significant in opposite direction stated by hypothesis. Two-tail test of significance employed.

TABLE 8

SUMMARY OF CHI SQUARE AND P VALUES FOR DIFFERENCES BETWEEN NEGATIVE PROJECTIVE AND DIRECT RESPONSES TO SOCIALLY CONFLICTED OBJECTS OF INQUIRY

Item No.	Object of Inquiry Self-Worth	College Group (N=102)		High School Group (N=210)		Total Group (N=312)	
		χ^2	P	χ^2	P	χ^2	P
1.	Jobs with responsibility	32.36	.001	55.41	.001	87.78	.001
2.	Thought job too much	22.51	.001	99.75	.001	119.11	.001
5.	Others are around	29.03	.001	20.51	.001	43.93	.001
13.	Others doing better	17.85	.001	40.69	.001	58.25	.001
20.	Do whole thing better by oneself	19.69	.001	47.53	.001	67.22	.001
28.	Odds are against one	4.59	.02	26.61	.001	29.12	.001
34.	Working with others	1.96	--	12.73	.001	13.34	.001
42.	Not invited to party	1.16	--	10.52	.01*	4.28	.05*

*Significant in opposite direction stated by hypothesis. Two-Tail test of significance employed.

TABLE 9

FREQUENCIES OF NEGATIVE PROJECTIVE AND DIRECT RESPONSES TO TEN ITEMS CONCERNING THE BLIND, WITH CHI SQUARE AND P VALUES FOR DIFFERENCES
(Total Group: N = 312)

Object of Inquiry	f Projective Negative Responses	f Direct Negative Responses	χ^2	P
8. Blind person in same school	61	10	27.55	.001
12. Choose between schools	264	134	.06	--
16. Meet blind person	79	10	44.06	.001
24. Work next to blind person	57	6	35.52	.001
30. Blind student in same class	80	15	31.25	.001
40. Admit blind person to club	90	34	5.37	.02
45. Friend stopped dating blind person	88	23	20.04	.001
50. Having a blind teacher	145	44	22.50	.001
58. Helping blind student with homework	29	2	21.55	.001
62. Sibling marrying blind person	75	18	20.28	.001
Total	968	296		

TABLE 10

FREQUENCIES OF NEGATIVE PROJECTIVE AND DIRECT RESPONSES TO TEN ITEMS CONCERNING THE BLIND, WITH CHI SQUARE AND P VALUES FOR DIFFERENCES
(College Group: N = 102)

Object of Inquiry	f Projective Negative Responses	f Direct Negative Responses	χ^2	P
8. Blind person in same school	19	2	11.84	.001
12. Choose between schools	84	32	4.76	.02
16. Meet blind person	31	6	20.16	.001
24. Work next to blind person	19	5	4.26	.02
30. Blind student in same class	25	4	17.64	.001
40. Admit blind person to club	28	10	2.28	--
45. Friend stopped dating blind person	19	5	4.26	.02
50. Having a blind teacher	47	12	11.25	.001
58. Helping blind student with homework	4	0	--	--
62. Sibling marrying blind person	33	9	6.81	.001
Total	309	85		

TABLE 11

FREQUENCIES OF NEGATIVE PROJECTIVE AND DIRECT RESPONSES TO TEN ITEMS CONCERNING THE BLIND, WITH CHI SQUARE AND P VALUES FOR DIFFERENCES (High School Group: N = 210)

Object of Inquiry	f Projective Negative Responses	f Direct Negative Responses	χ^2	P
8. Blind person in same school	42	8	16.09	.001
12. Choose between schools	180	102	3.20	.05*
16. Meet blind person	48	4	33.33	.001
24. Work next to blind person	38	1	34.10	.001
30. Blind student in same class	55	11	19.80	.001
40. Admit blind person to club	62	24	3.16	.05
45. Friend stopped dating blind person	69	18	15.78	.001
50. Having a blind teacher	98	32	11.79	.001
58. Helping blind student with homework	25	2	17.64	.001
62. Sibling marrying blind person	42	9	13.71	.001
Total	659	211		

*Significant in opposite direction stated by hypothesis. Two-tail test of significance employed.

TABLE 12

SUMMARY OF CHI SQUARE AND P VALUES FOR DIFFERENCES BETWEEN NEGATIVE PROJECTIVE AND DIRECT RESPONSES TO SOCIALLY CONFLICTED OBJECTS OF INQUIRY

Item No.	Object of Inquiry Blind	College Group (N=102)		High School Group (N=210)		Total Group (N=312)	
		χ^2	P	χ^2	P	χ^2	P
8.	Blind person in same schools	11.84	.001	16.09	.001	27.55	.001
12.	Choose between schools	4.76	.02	3.20	.05*	.06	--
16.	Meet blind person	20.16	.001	33.33	.001	44.06	.001
24.	Work next to blind person	4.26	.02	34.10	.001	35.52	.001
30.	Blind student in same class	17.64	.001	19.80	.001	31.25	.001
40.	Admit blind person to club	2.28	--	3.16	.05	5.37	.02
45.	Friend stopped dating blind person	4.26	.02	15.78	.001	20.04	.001
50.	Having a blind teacher	11.25	.001	11.79	.001	22.40	.001
58.	Helping blind student with homework	--	--	17.64	.001	21.55	.001
62.	Sibling marrying blind person	6.81	.001	13.71	.001	20.28	.001

*Significant in opposite direction stated by hypothesis. Two-tail test of significance employed.

TABLE 13

FREQUENCIES OF NEGATIVE PROJECTIVE AND DIRECT RESPONSES TO TEN ITEMS CONCERNING THE CEREBRAL PALSIED, WITH CHI SQUARE AND P VALUES FOR DIFFERENCES
(Total Group: N = 312)

Object of Inquiry	f Projective Negative Responses	f Direct Negative Responses	χ^2	P
4. C.P. in same class	75	4	59.85	.001
21. C.P. in separate schools	104	37	8.65	.001
27. Employ C.P. or non-C.P.	206	88	4.36	.02
35. Helping C.P. with homework	17	2	9.94	.001
39. Admit C.P. to club	51	6	29.82	.001
44. Working with C.P.	105	14	56.46	.001
47. C.P. in same school	61	5	42.63	.001
54. Compete with C.P. for job	131	32	34.26	.001
60. C.P. in dance club	137	79	3.21	--
63. See C.P. drooling	164	104	11.80	.001*
Total	1051	371		

*Significant in opposite direction stated by hypothesis. Two-tail test of significance employed.

TABLE 14

FREQUENCIES OF NEGATIVE PROJECTIVE AND DIRECT RESPONSES TO TEN ITEMS CONCERNING THE CEREBRAL PALSIED, WITH CHI SQUARE AND P VALUES FOR DIFFERENCES
(College Group: N = 102)

Object of Inquiry	f Projective Negative Responses	f Direct Negative Responses	χ^2	P
4. C.P. in same class	22	1	18.18	.001
21. C.P. in separate schools	26	8	3.84	.02
27. Employ C.P. or non-C.P.	53	19	4.24	.02
35. Helping C.P. with homework	2	1	--	--
39. Admit C.P. to club	12	2	5.33	.01
44. Working with C.P.	33	5	16.03	.001
47. C.P. in same school	14	2	7.14	.001
54. Compete with C.P. for job	43	6	22.34	.001
60. C.P. in dance club	43	28	3.93	.05*
63. See C.P. drooling	54	35	4.74	.05*
Total	302	107		

*Significant in opposite direction stated by hypothesis. Two-tail test of significance employed.

TABLE 15

FREQUENCIES OF NEGATIVE PROJECTIVE AND DIRECT RESPONSES TO TEN ITEMS CONCERNING THE CEREBRAL PALSIED, WITH CHI SQUARE AND P VALUES FOR DIFFERENCES
(High School Group: N = 210)

Object of Inquiry	f Projective Negative Responses	f Direct Negative Responses	χ^2	P
4. C.P. in same class	53	3	41.67	.001
21. C.P. in separate schools	78	29	5.12	.01
27. Employ C.P. or non-C.P.	153	69	1.47	--
35. Helping C.P. with homework	15	1	11.26	.001
39. Admit C.P. to club	39	4	24.64	.001
44. Working with C.P.	72	9	40.50	.001
47. C.P. in same school	47	3	35.76	.001
54. Compete with C.P. for job	88	26	14.72	.001
60. C.P. in dance club	94	51	.68	--
63. See C.P. drooling	110	69	7.12	.01*
Total	749	264		

*Significant in opposite direction stated by hypothesis. Two-tail test of significance employed.

TABLE 16

SUMMARY OF CHI SQUARE AND P VALUES FOR DIFFERENCES BETWEEN NEGATIVE PROJECTIVE AND DIRECT RESPONSES TO SOCIALLY CONFLICTED OBJECTS OF INQUIRY

Item No.	Object of Inquiry Cerebral Palsy	College Group (N=102)		High School Group (N=210)		Total Group (N=312)	
		χ^2	P	χ^2	P	χ^2	P
4.	C.P. in same class	18.18	.001	41.67	.001	59.85	.001
21.	C.P. in separate schools	3.84	.02	5.12	.01	8.65	.001
27.	Employ C.P. or non-C.P.	4.24	.02	1.47	--	4.36	.02
35.	Helping C.P. with homework	--	--	11.26	.001	9.94	.001
39.	Admit C.P. to club	5.33	.01	24.64	.001	29.82	.001
44.	Working with C.P.	16.03	.001	40.50	.001	56.46	.001
47.	C.P. in same school	7.14	.001	35.76	.001	42.63	.001
54.	Compete with C.P. for job	22.34	.001	14.72	.001	34.26	.001
60.	C.P. in dance club	3.93	.05*	.68	--	3.21	--
63.	See C.P. drooling	4.74	.05*	7.12	.01*	11.80	.001*

*Significant in opposite direction stated by hypothesis. Two-tail test of significance employed.

TABLE 17

FREQUENCIES OF NEGATIVE PROJECTIVE AND DIRECT RESPONSES TO TEN ITEMS CONCERNING THE STUTTERER, WITH CHI SQUARE AND P VALUES FOR DIFFERENCES
(Total Group: N = 312)

Object of Inquiry	f Projective Negative Responses	f Direct Negative Responses	χ^2	P
11. Stutterer at party	186	56	29.44	.001
18. Speaker began stuttering	228	138	10.10	.01*
22. Teacher began stuttering	213	115	1.35	--
25. Blind date stuttered	129	50	6.51	.01
31. Admit stutterer to club	172	106	9.30	.01*
36. Salesperson stuttered	130	57	1.96	--
37. Voting for S. or non-S.	134	49	9.67	.001
46. Stutterer in debate club	143	70	.06	--
53. Choose S. or non-S.	169	69	5.68	.01
57. Sibling marrying stutterer	76	7	50.57	.001
Total	1580	717		

*Significant in opposite direction stated by hypothesis. Two-tail test of significance employed.

TABLE 18

FREQUENCIES OF NEGATIVE PROJECTIVE AND DIRECT RESPONSES TO TEN ITEMS CONCERNING THE STUTTERER, WITH CHI SQUARE AND P VALUES FOR DIFFERENCES
(College Group: N = 102)

Object of Inquiry	f Projective Negative Responses	f Direct Negative Responses	χ^2	P
11. Stutterer at party	61	18	10.24	.001
18. Speaker began stuttering	77	50	11.68	.001*
22. Teacher began stuttering	72	43	2.72	--
25. Blind date stuttered	40	20	.00	+-
31. Admit stutterer to club	56	39	8.64	.01*
36. Salesperson stuttered	38	18	.10	--
37. Voting for S. or non-S.	43	12	8.39	.001
46. Stutterer in debate club	49	28	1.00	--
53. Choose S. or non-S.	53	17	6.81	.001
57. Sibling marrying stutterer	25	2	17.64	.001
Total	514	247		

*Significant in opposite direction stated by hypothesis. Two-tail test of significance employed.

TABLE 19

FREQUENCIES OF NEGATIVE PROJECTIVE AND DIRECT RESPONSES TO TEN ITEMS CONCERNING THE STUTTERER, WITH CHI SQUARE AND P VALUES FOR DIFFERENCES
(High School Group: N = 210)

Object of Inquiry	f Projective Negative Responses	f Direct Negative Responses	χ^2	P
11. Stutterer at party	125	38	19.20	.001
18. Speaker began stuttering	151	88	4.13	.05*
22. Teacher began stuttering	141	72	.06	--
25. Blind date stuttered	89	30	9.44	.001
31. Admit stutterer to club	116	67	2.79	--
36. Salesperson stuttered	92	39	2.13	--
37. Voting for S. or non-S.	91	37	3.17	.05
46. Stutterer in debate club	94	42	1.06	--
53. Choose S. or non-S.	116	52	1.24	--
57. Sibling marrying stutterer	51	5	32.96	.001
Total	1066	470		

*Significant in opposite direction stated by hypothesis. Two-tail test of significance employed.

TABLE 20

SUMMARY OF CHI SQUARE AND P VALUES FOR DIFFERENCES BETWEEN NEGATIVE PROJECTIVE AND DIRECT RESPONSES TO SOCIALLY CONFLICTED OBJECTS OF INQUIRY

Item No.	Object of Inquiry Stutterer	College Group (N=102)		High School Group (N=210)		Total Group (N=312)	
		χ^2	P	χ^2	P	χ^2	P
11.	Stutterer at party	10.24	.001	19.20	.001	29.44	.001
18.	Speaker began stuttering	11.68	.001*	4.13	.05*	10.10	.01*
22.	Teacher began stuttering	2.72	--	.06	--	1.35	--
25.	Blind date stuttered	.00	--	9.44	.001	6.51	.01
31.	Admit stutterer to club	8.64	.01*	2.79	--	9.30	.01*
36.	Salesperson stuttered	.10	--	2.13	--	1.96	--
37.	Voting for S. or non-S.	8.39	.001	3.17	.05	9.67	.001
46.	Stutterer in debate club	1.00	--	1.06	--	.06	--
53.	Choose S. or non-S.	6.81	.001	1.24	--	5.68	.01
57.	Sibling marrying stutterer	17.64	.001	32.96	.001	50.57	.001

*Significant in opposite direction stated by hypothesis. Two-tail test of significance employed.

Hypothesis II

The previous hypothesis explored the pattern of direct and projective responses to socially conflicted objects of inquiry. Results supported the hypothesis that there would be a relatively large discrepancy between projective and direct responses to socially conflicted objects of inquiry. The related hypothesis stated that responses to socially neutral objects of inquiry should have a relatively small discrepancy between projective and direct tests. There should be minimal shifts occurring between responses to projective and direct questionnaires. The projective test item stated, "As between Mother's and Father's way, Gloria/Mel usually chose . . ." To ensure that an adequate amount of data would be available for analysis, the direct item was presented in a multiple-choice form: "As between Mother's and Father's ways, I choose (circle one) (a) practically always Mother's; (b) usually Mother's although sometimes Father's; (c) practically always Father's; (d) usually Father's although sometimes Mother's." Two hundred forty-three subjects responded to the projective and direct questionnaires. Table 21 presents the data for the male, female, and total group.

TABLE 21

COMPARISON OF PROJECTIVE AND DIRECT RESPONSES TO THE ITEM CONCERNING PREFERENCE FOR MOTHER'S OR FATHER'S WAYS, FOR MALE, FEMALE, AND TOTAL GROUP, WITH CHI SQUARE VALUES FOR THE CHANGE BETWEEN RESPONSES

Females (N=140)		Males (N=103)		Total (N=243)	
A	B	A	B	A	B
20	19	14	48	34	67
C	D	C	D	C	D
75	26	25	16	100	42
χ^2_a .78		χ^2_a .13		χ^2_a .84	

Chi square values were nonsignificant and served to support the hypothesis that responses to socially neutral objects of inquiry do not vary between public and private levels of responding. The hypothesis that the discrepancy between projective and direct responses should be relatively small is confirmed for female, male, and the combined group.[1]

Hypotheses III, IV, and V

The following hypotheses examined the interrelationships of positive and negative responses in relation to projective and direct questionnaires. Hypothesis III stated that when projective responses are positive on the projective test, direct responses should tend to agree. Table 22 presents data for the college, high school, and total groups.

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[1]McNemar's formula was employed to assess the significance of over-all changes. $\chi^2 = \frac{(A-D)^2}{(A+D)}$. Cell A contains the frequency of subjects who changed from "mother" on the projective test to "father" on the direct test. Cell D contains the frequency of subjects who changed from "father" on the projective test to "mother" on the direct test. Cell B contains the frequency of subjects who responded with "father" on both tests. Cell C contains the frequency of subjects who responded with "mother" on both tests. In an earlier analysis, the 48 test items were subjected to McNemar's test to determine the significance of over-all change. Without regard to direction of change, 47 of 48 items were strikingly significant. The final χ^2 procedure involved the utilization of marginal totals to assess the significance of shifts from negative, projective responses to positive direct responses. The formula for this test is symbolized by $\chi^2 = \frac{(A-C)^2}{(A+C)}$. A cell contains the frequency of subjects who shifted from a negative projective response to a positive direct response. Cell C contains the frequency of subjects who responded negatively on both tests. Cell B contains the frequency of subjects who responded positively on both tests. Cell D contains the frequency of subjects who shifted from a positive response on the projective test to a negative response on the direct test.

TABLE 22

PERCENTAGE OF POSITIVE, PROJECTIVE RESPONSES THAT REMAINED POSITIVE ON THE DIRECT TEST

Object of Inquiry	College Group (N=102)	High School Group (N=210)	Total Group (N=312)
Self-Worth	90.09	92.74	91.88
Negro	93.00	91.18	91.78
Blind	93.38	90.00	91.12
Cerebral palsied	92.89	89.85	90.91
Stutterer	86.56	83.36	84.41

The high percentages indicate that there was considerable inter-test stability associated with positive, projective responses in contrast to projective, negative responses. Only a small portion of positive, projective responses were changed to negative responses on the direct test. The data clearly support the hypothesis under consideration.

Hypothesis IV focused on the dynamics of negative, projective responses to the direct questionnaire. The previous tables indicated that negative, projective responses to socially conflicted objects of inquiry are systematically influenced in the direction of social desirability on the direct questionnaire for all objects of inquiry except the stutterer. The following table summarizes the previous data.

TABLE 23

PERCENTAGE OF NEGATIVE, PROJECTIVE RESPONSES CHANGED TO POSITIVE RESPONSES ON THE DIRECT TEST

Object of Inquiry	College Group (N=102)	High School Group (N=210)	Total Group (N=312)
Self-Worth	74.51	73.53	73.86
Negro	73.37	74.87	74.39
Blind	72.49	67.98	69.42
Cerebral palsied	64.56	64.75	64.70
Stutterer	51.94	55.90	54.62

The summary data in Table 23 indicate that Self-Worth, the Negro, the Blind, and the Cerebral Palsied are socially conflicted objects of inquiry. Systematic differences are noted between private and public levels of responding. A majority of negative, projective responses were changed to positive responses on the direct test. This pattern was manifested for all objects of inquiry, except the stutterer.

The fifth hypothesis examined the expected relationship between negative, direct responses and matched, projective responses. It was anticipated that there would be a small minority of subjects who would defy social expectation and respond negatively on the direct test. Under these conditions, it was anticipated that projective test responses would also be negative. Table 24 presents the data for the hypothesis.

TABLE 24

PERCENTAGE OF AGREEMENT OF NEGATIVE, DIRECT RESPONSES WITH THEIR MATCHED, PROJECTIVE RESPONSES

Object of Inquiry	College Group (N=102)	High School Group (N=210)	Total Group (N=312)
Self-Worth	72.41	78.44	76.40
Negro	76.96	72.12	73.68
Blind	64.39	59.43	60.78
Cerebral Palsied	69.72	65.83	66.36
Stutterer	78.41	73.20	74.92

The data supported the hypothesis under investigation. Subjects who defied social expectation on the direct test usually had responses in the same way on the projective test.

Except for the Stutterer Scale, responses to socially conflicted objects of inquiry varied in a predictable manner between public and private levels of responding. Responses to a socially neutral object of inquiry demonstrated a lack of significant change between projective and direct responses. This predicted lack of change supported the hypothesis under investigation.

Hypotheses VI and VII

For this phase of the investigation, the total-score distributions of the college and high school groups were plotted for each of the five objects of inquiry. The first hypothesis stated that responses to socially conflicted objects of inquiry on the projective test would tend to approximate a normal distribution. It was anticipated that a majority of subjects would be concentrated around a central score value with generally decreasing frequencies of subjects located at either end of the score distribution. The related hypothesis stated that responses to socially conflicted objects of inquiry on the direct questionnaire would tend to approximate a J curve.

The following graphs present the projective and direct score totals for each object of inquiry for the high school and college groups.

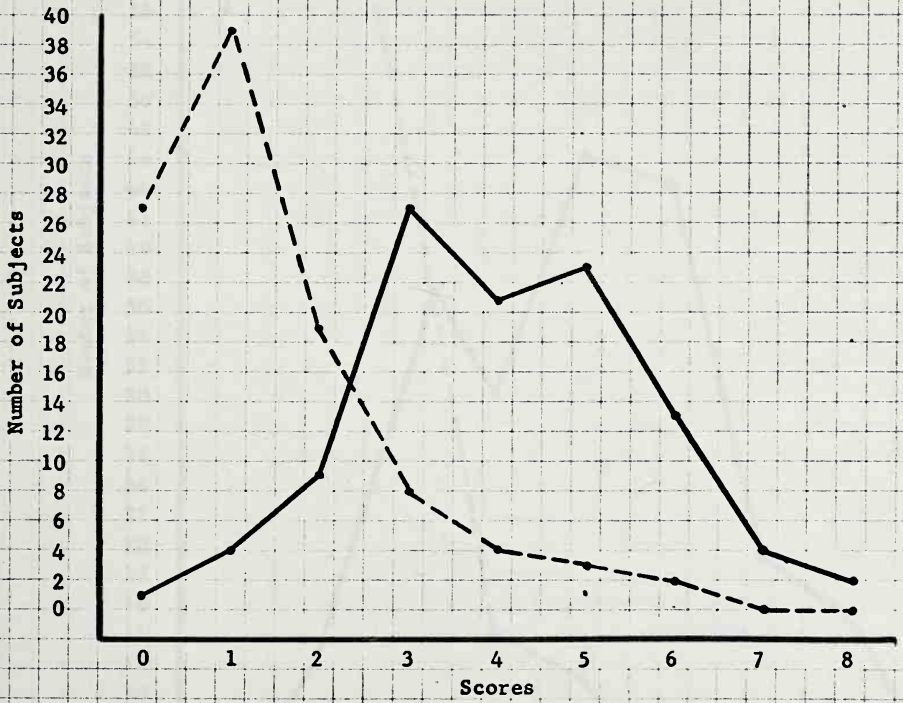
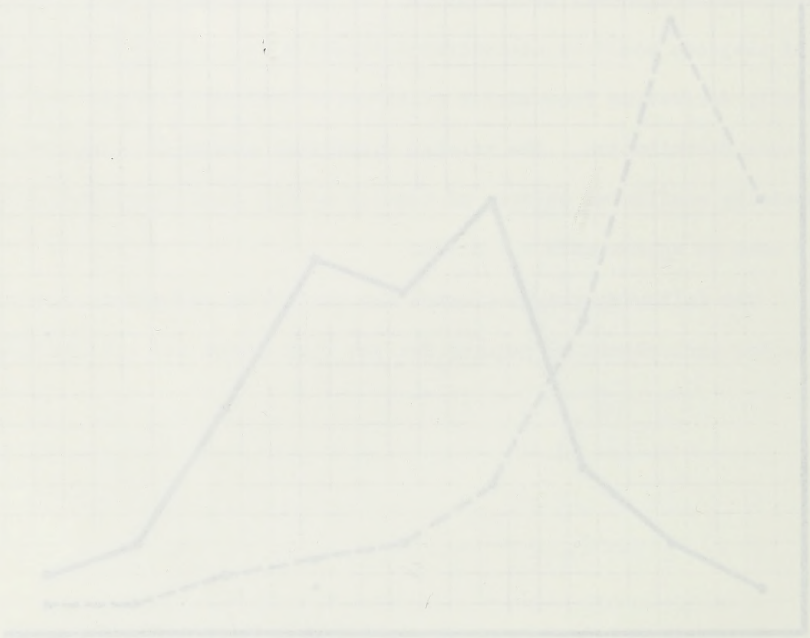


Figure 1. Distributions of Projective and Direct Scores on the Self-Worth Scale--College Group (N = 102)

——— = projective test.
---------- = direct test.



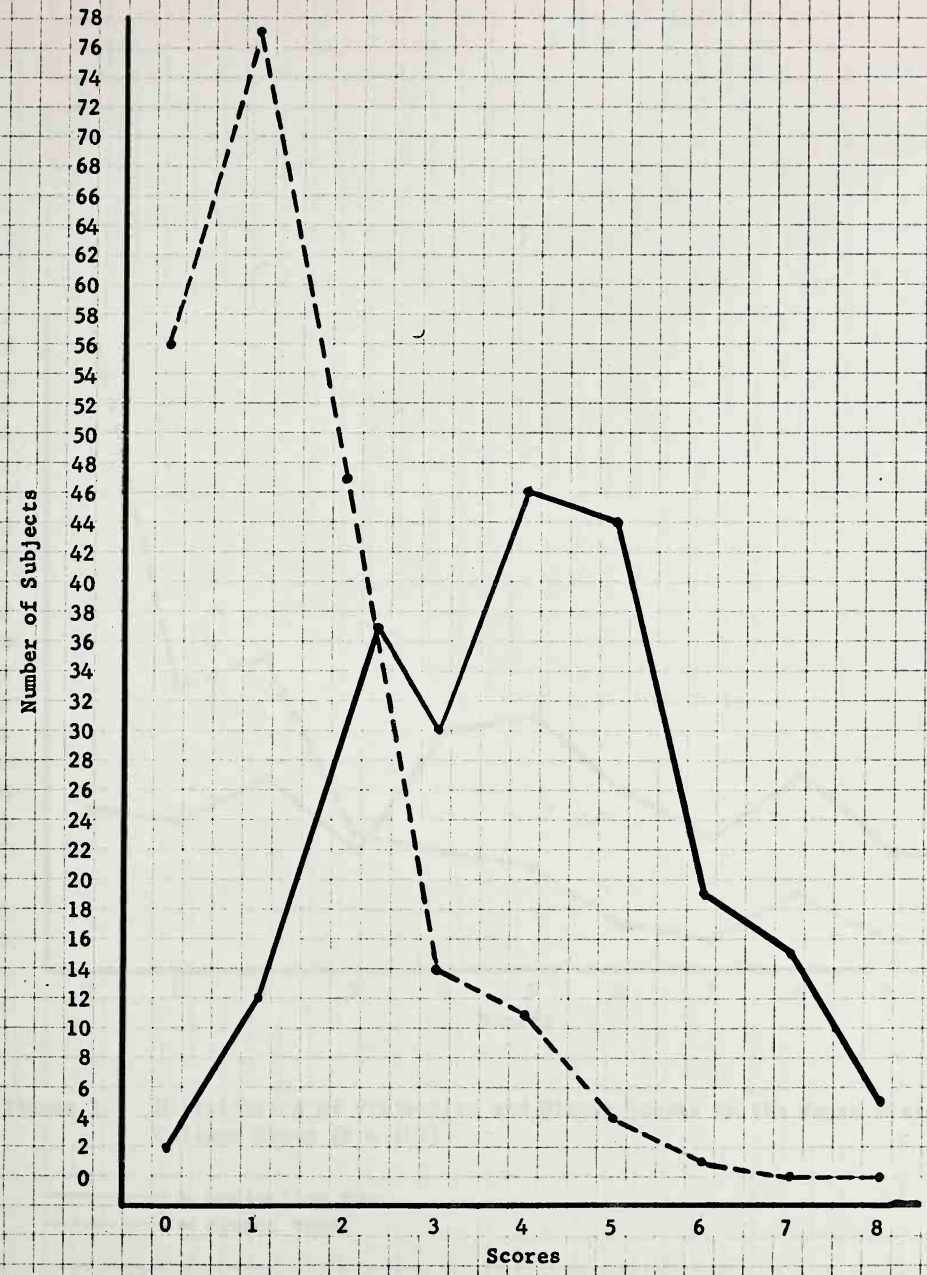
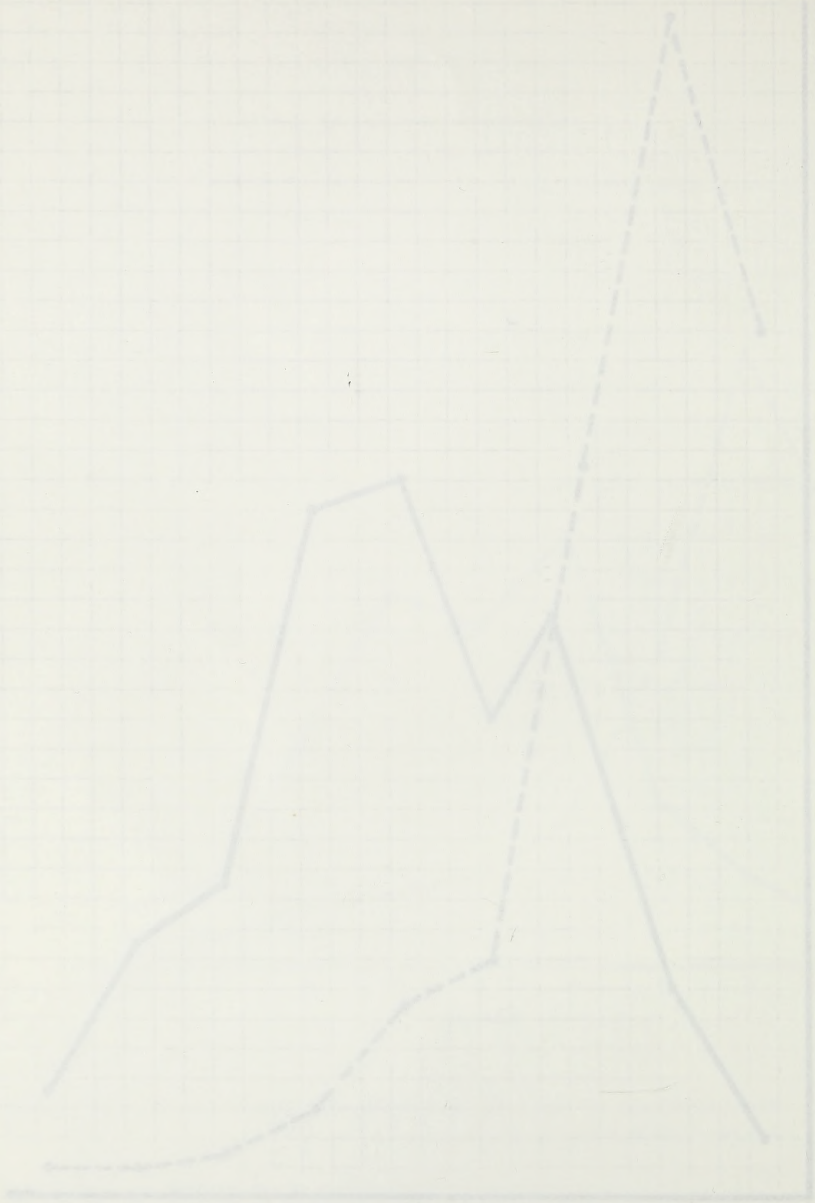


Figure 2. Distributions of Projective and Direct Scores on the Self-Worth Scale--High School Group (N = 210)

——— = projective test.
---------- = direct test.



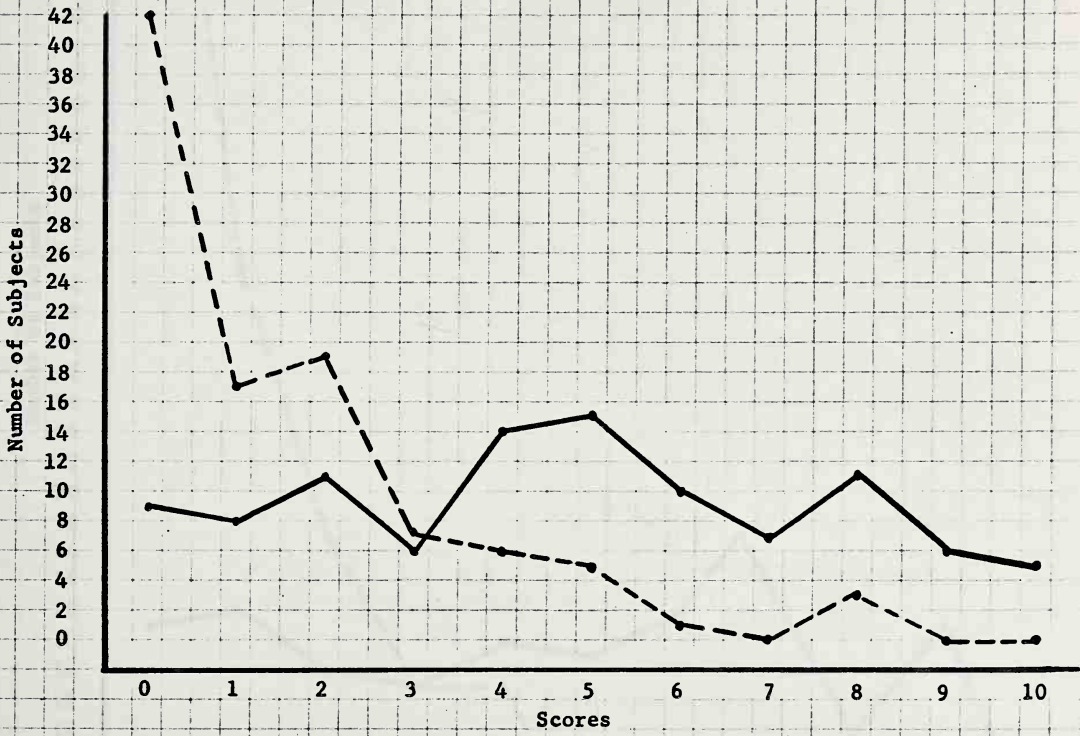
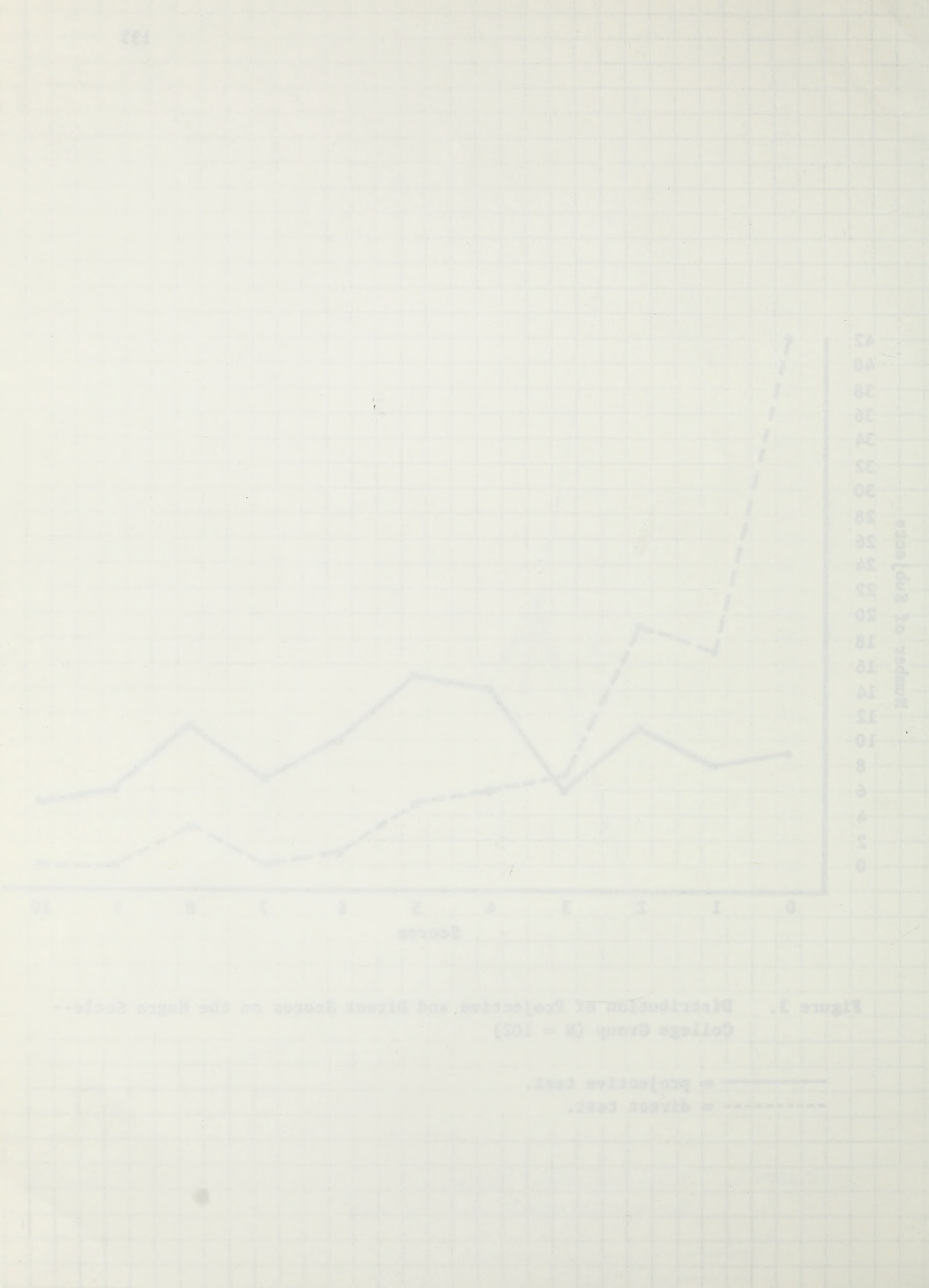


Figure 3. Distribution of Projective and Direct Scores on the Negro Scale--College Group (N = 102)

——— = projective test.
---------- = direct test.



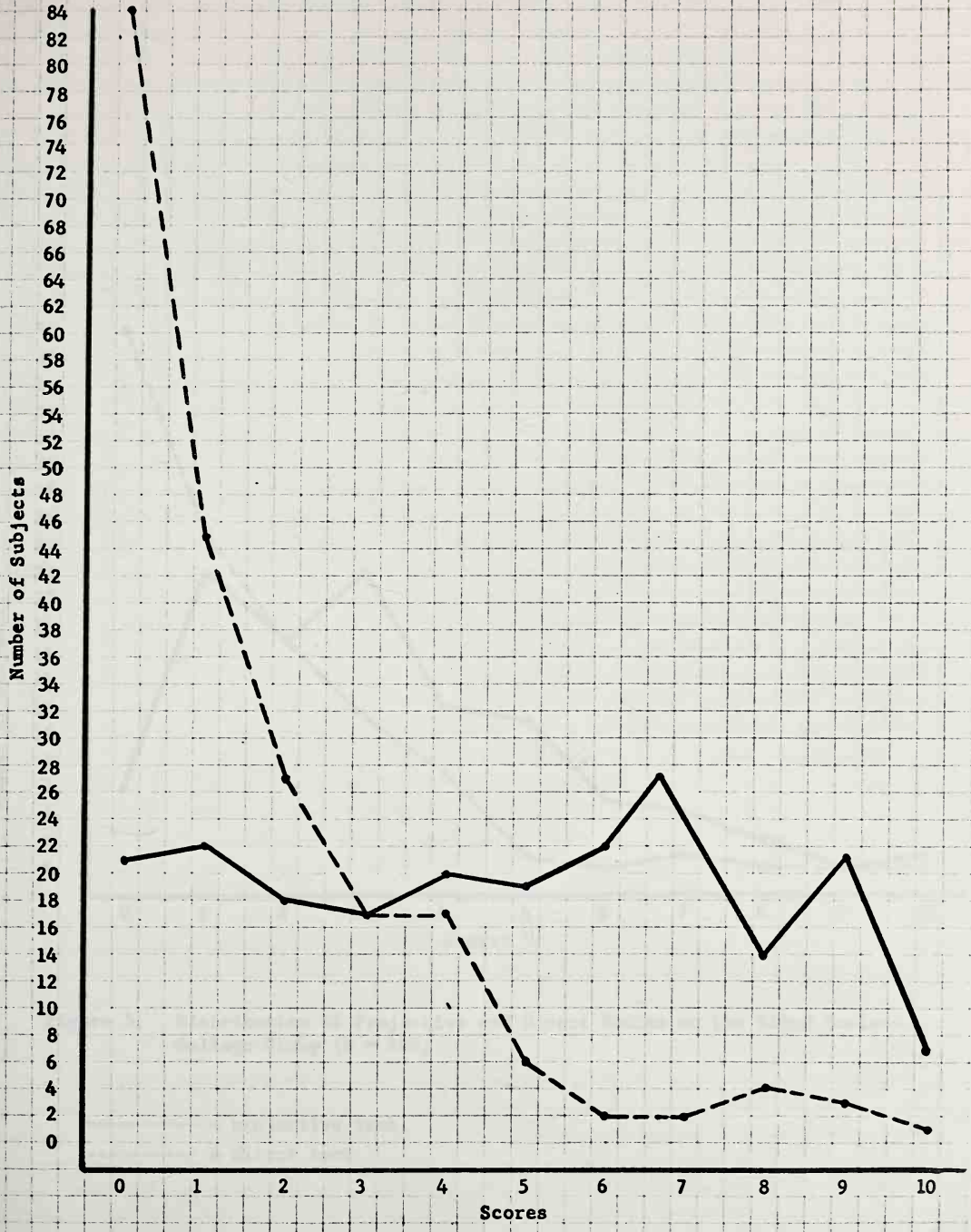


Figure 4. Distribution of Projective and Direct Scores on the Negro Scale--High School Group (N = 210)

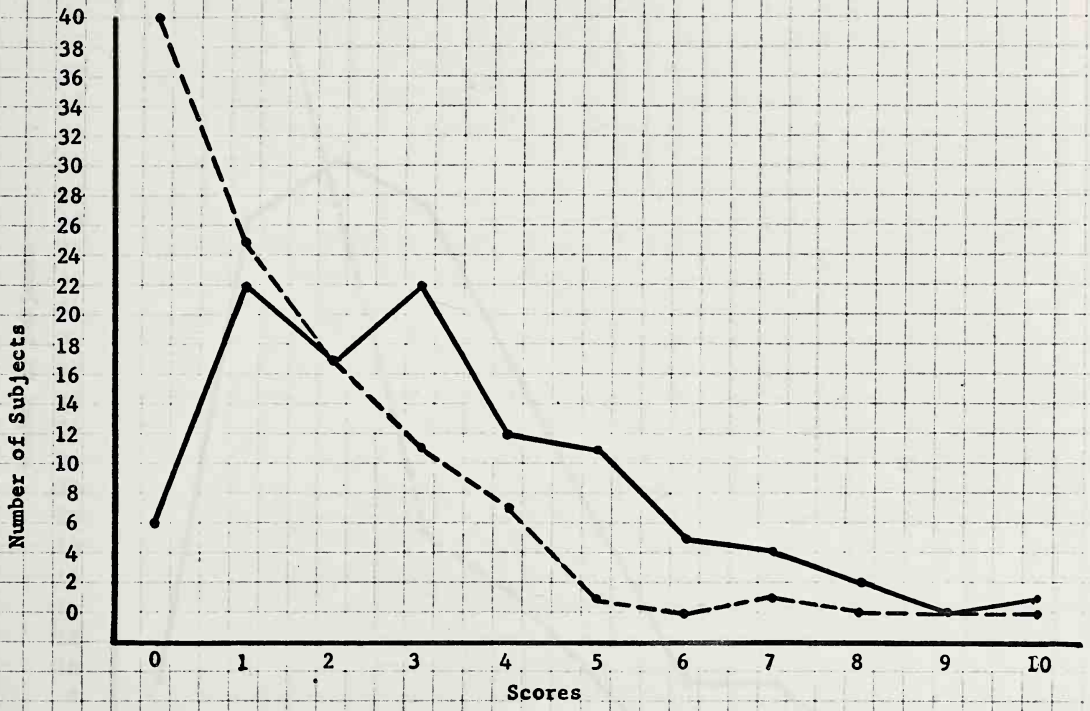


Figure 5. Distribution of Projective and Direct Scores on the Blind Scale--College Group (N = 102)

——— = projective test.

---------- = direct test.

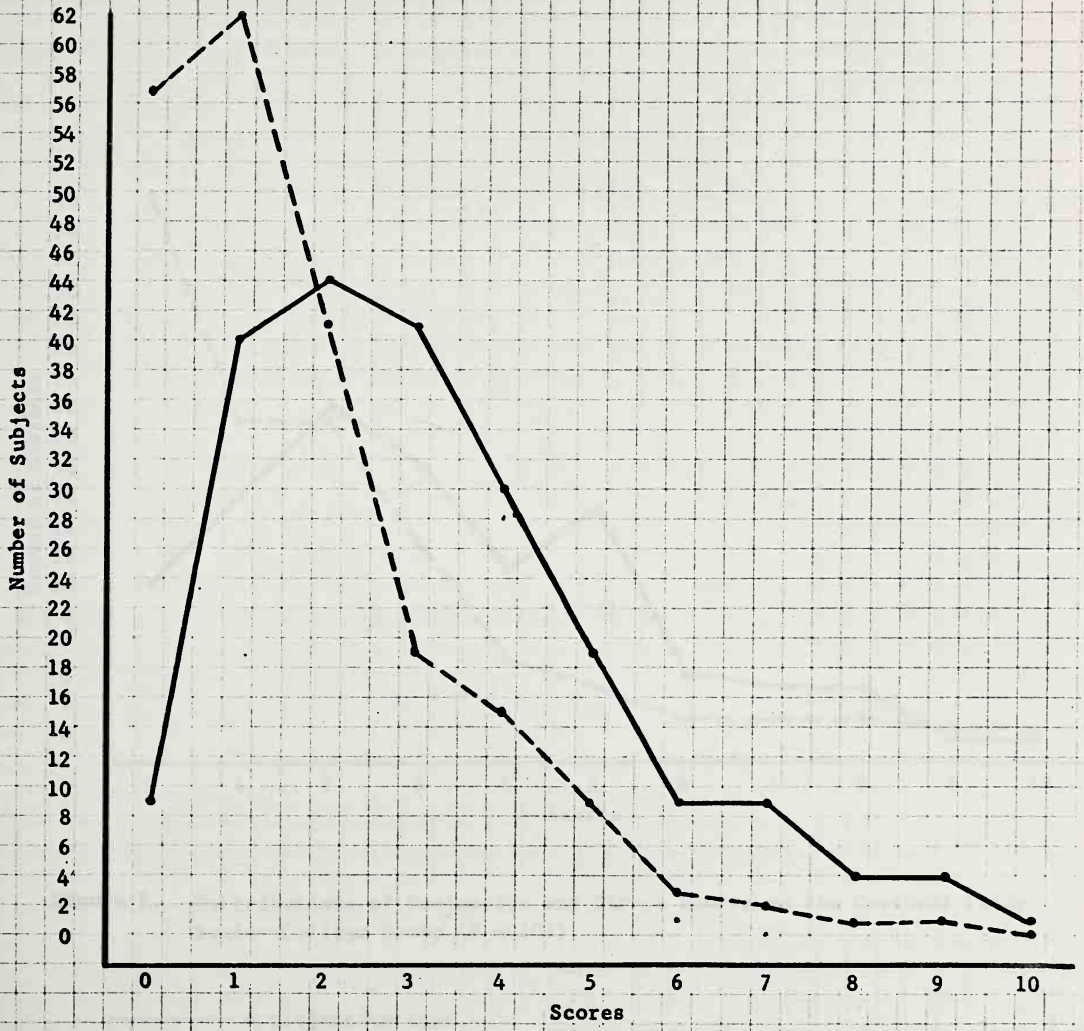
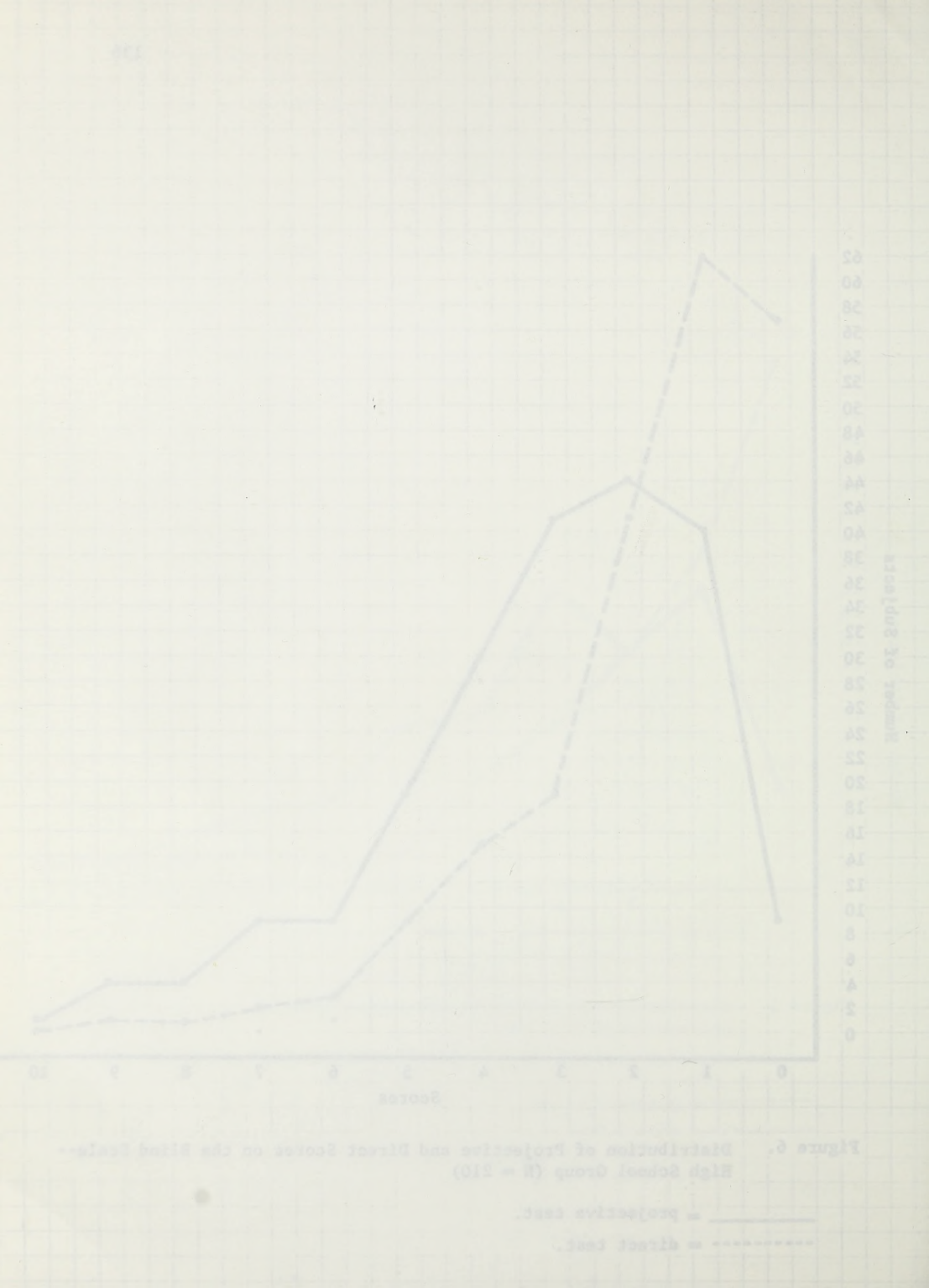


Figure 6. Distribution of Projective and Direct Scores on the Blind Scale--High School Group (N = 210)

———— = projective test.

---------- = direct test.



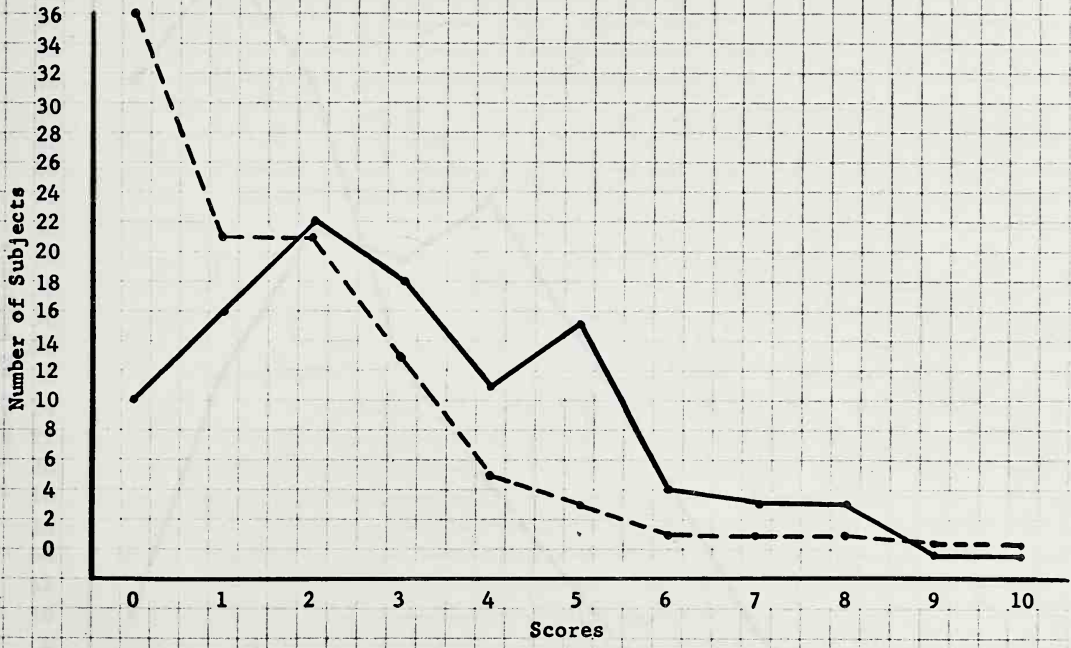
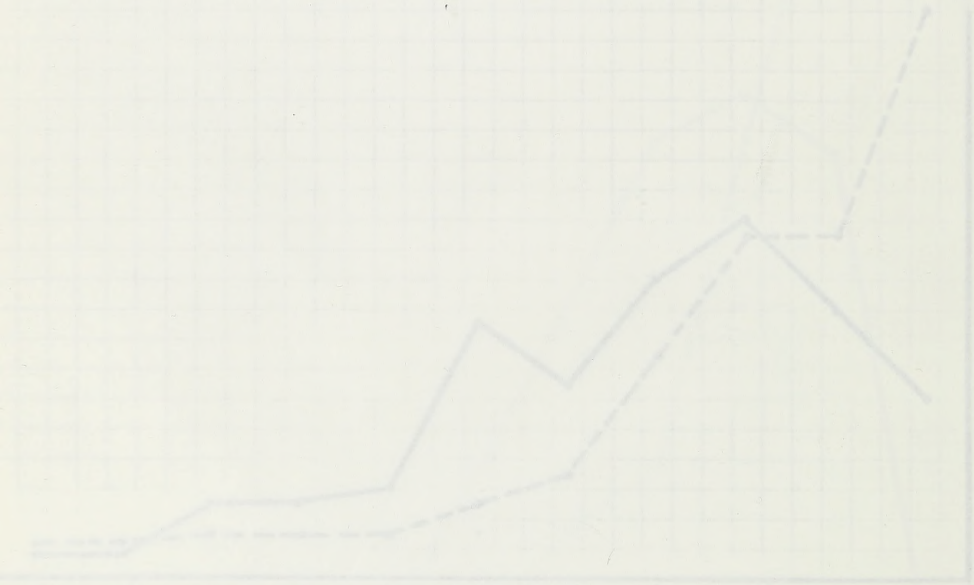


Figure 7. Distributions of Projective and Direct Scores on the Cerebral Palsy Scale--College Group (N = 102)

——— = projective test.
---------- = direct test.



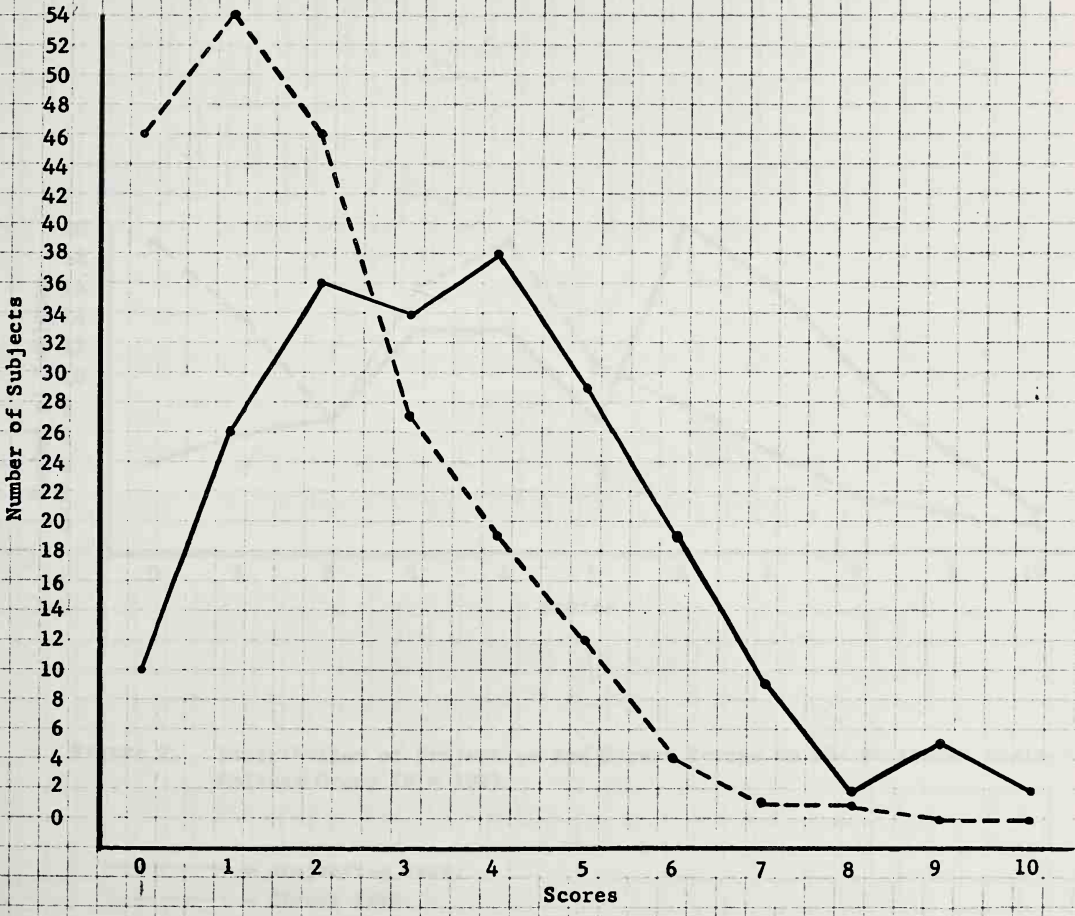


Figure 8. Distributions of Projective and Direct Scores on the Cerebral Palsy Scale--High School Group (N = 210)

——— = projective test.
---------- = direct test.

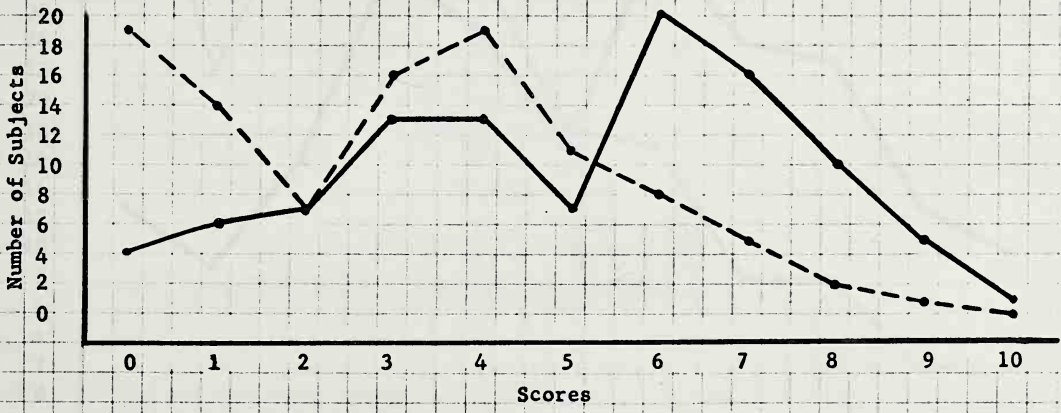


Figure 9. Distribution of Projective and Direct Scores on the Stutterer Scale--College Group (N = 102)

——— = projective test.
---------- = direct test.

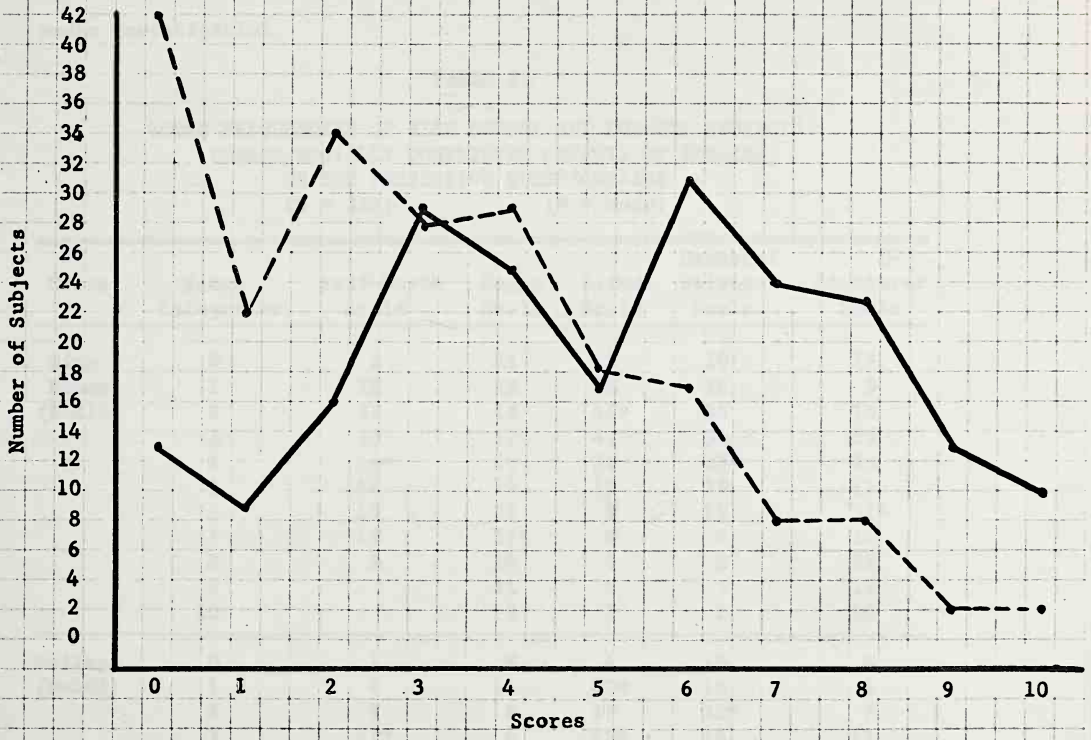


Figure 10. Distributions of Projective and Direct Scores on the Stutterer Scale--High School Group (N = 210)

——— = projective test.

---------- = direct test.

The first hypothesis stated that projective score distributions of socially conflicted objects of inquiry would tend to approximate a normal distribution. Inspection of score distributions offers support for the hypothesis under consideration. The following table presents the score frequencies associated with the groups and scales under investigation.

TABLE 25

SCORE FREQUENCIES OF HIGH SCHOOL AND COLLEGE SUBJECTS TOWARD SOCIALLY CONFLICTED OBJECTS OF INQUIRY ON THE PROJECTIVE QUESTIONNAIRE
(N = 312) (* = Mode)

Group	Score Categories	Self-Worth Scale	Negro Scale	Blind Scale	Cerebral Palsied Scale	Stutterer Scale
High School (N=210)	0	2	21	9	10	13
	1	12	22	40	26	9
	2	37	18	44*	36	16
	3	30	17	41	34	29
	4	46*	20	30	38*	25
	5	44	19	19	29	17
	6	19	22	9	19	31*
	7	15	27*	9	9	24
	8	5	14	4	2	23
	9		21	4	5	13
	10		9	1	2	10
College (N=102)	0	1	9	6	10	4
	1	4	11	22*	16	6
	2	9	8	17	22*	7
	3	27*	6	22*	18	13
	4	21	14	12	11	13
	5	23	15*	11	15	7
	6	13	10	5	4	20*
	7	4	7	4	3	16
	8	2	11	2	3	10
	9		6	0	0	5
	10		5	1	0	1

The related hypothesis stated that direct score distributions of socially conflicted objects of inquiry would tend to approximate a J-curve distribution. Inspection of score distributions supports the hypothesis under consideration. The following table presents the modal values associated with the groups and scales under consideration.

TABLE 26

NUMBER OF HIGH SCHOOL AND COLLEGE SUBJECTS WHO RESPONDED WITH 0 OR 1 NEGATIVE RESPONSE TO SOCIALLY CONFLICTED OBJECTS OF INQUIRY ON THE DIRECT QUESTIONNAIRE
(N = 312) (* = Mode)

Group	Score Category	Self-Worth Scale	Negro Scale	Blind Scale	Cerebral Palsied Scale	Stutterer Scale
High School (N=210)	0	56	84	57	46	42
	1	77*	45	62*	54*	22
College (N=102)	0	27	42*	40*	36*	19*[a]
	1	39*	17	25	21	14

[a]Nineteen subjects were also located in score category 4.

Except for the Stutterer, College Group distribution, all distributions approximated a J curve. Modal values were concentrated at the lower end of the score distributions, with a decreasing frequency of subjects located in the remaining score categories. The following table summarizes the data for both hypotheses.

TABLE 27

SUMMARY OF SCORE DISTRIBUTIONS FOR COLLEGE AND HIGH SCHOOL GROUPS TOWARD SOCIALLY CONFLICTED OBJECTS OF INQUIRY (N = 312)

College Group (N = 102)				High School Group (N = 210)			
Scale	Test	Distribution	Supports Hypotheses	Scale	Test	Distribution	Supports Hypotheses
Self-Worth	1	Normal	Yes	Self-Worth	1	Normal	Yes
	2	J Curve	Yes		2	J Curve	Yes
Negro	1	Rectangular	No[a]	Negro	1	Rectangular	No[a]
	2	J Curve	Yes		2	J Curve	Yes
Blind	1	Negatively Skewed, Normal	Yes	Blind	1	Negatively Skewed, Normal	Yes
	2	J Curve	Yes		2	J Curve	Yes
Cerebral Palsy	1	Negatively Skewed, Normal	Yes	Cerebral Palsy	1	Negatively Skewed, Normal	Yes
	2	J Curve	Yes		2	J Curve	Yes
Stutterer	1	Positively Skewed, Normal	Yes	Stutterer	1	Normal	Yes
	2	Bi-modal	No		2	J Curve	Yes

[a]A normal distribution was hypothesized on the basis of demonstrating the existence of individual differences on the private attitudinal stratum. The rectangular distribution satisfies the basic intent of the hypothesis, since a rectangular distribution denotes a condition of maximum variation between subjects.

Mean score data were available for the total group. The following table depicts the mean scores for the total group of pre- and post-test scale results.

TABLE 28

MEAN SCORE VALUES FOR PROJECTIVE AND DIRECT RESPONSES TO SOCIALLY CONFLICTED OBJECTS OF INQUIRY (N = 312)

Object of Inquiry	Self-Worth	Negro	Blind	Cerebral Palsied	Stutterer
Projective Mean	4.00	4.70	3.11	3.38	5.07
Direct Mean	1.36	1.65	1.56	1.79	3.06

The hypothesized distributions are supported in all instances except for the direct responses to the stutterer scale. This exception will be discussed when the individual test items are analyzed.

Hypotheses VIII, IX, and X

The following three hypotheses explored the intercorrelations between projective, socially conflicted objects of inquiry.[1] Hypothesis VIII stated that there would be a positive relationship evidenced between the Negro Scale and the three disability scales. Hypothesis IX stated that there would be a positive relationship between the Self-Worth Scale and the remaining scales. Both hypotheses were supported by the data. The final hypothesis stated that there would be significant differences in the degree of relationship between each of the handicapped groups. No significant differences were noted among intercorrelations between the three disability scales. The relevant data are presented below.

[1]Pearson Product-Moment correlations were utilized for this phase of the investigation.

TABLE 29

INTERCORRELATION MATRIX OF PROJECTIVE TEST SCALES
(N = 312)

	Self-Worth	Negro	Blind	Cerebral Palsied	Stutterer
Self-Worth	--	.51	.43	.40	.43
Negro		--	.60	.66	.60
Blind			--	.66	.60
Cerebral Palsied				--	.64
Stutterer					--

Inspection of the projective, intercorrelation matrix supports Hypotheses VIII and IX. Intercorrelations between projective objects of inquiry ranged from .40 to .66. Intercorrelations of the Negro Scale with socially conflicted objects of inquiry were higher than intercorrelations of the Self-Worth Scale with the same objects of inquiry. Intercorrelation differences between disability groups were deemed nonsignificant and failed to support the hypothesis of differences between disability scales.

The previous hypotheses were concerned with the relationship of socially conflicted objects of inquiry on the projective test. In addition, an intercorrelation matrix for the direct scale relationships is presented below.

TABLE 30

INTERCORRELATION MATRIX OF DIRECT TEST SCALES
(N = 312)

	Self-Worth	Negro	Blind	Cerebral Palsied	Stutterer
Self-Worth	--	.31	.35	.30	.35
Negro		--	.46	.44	.42
Blind			--	.60	.50
Cerebral Palsied				--	.56
Stutterer					--

Intercorrelations on the direct scale matrix were also positive, but lower than the r's evidenced on the projective matrix. No direct scale intercorrelation was higher than its matched, projective scale intercorrelation. These differences in direct and projective correlation levels will be discussed in the summary.

Hypotheses XI, XII, and XIII

Hypotheses XI, XII, and XIII stated there would be significant differences in test responses as a function of age, sex, and socio-economic level. Data for these hypotheses were analyzed using analyses of variance and covariance techniques.

(a) Hypothesis XI

Hypothesis XI stated there would be significant differences between high school and college age subjects. The data did not support the hypothesis. Relevant data for this section are in Table 31 below.

Interaction effects (age x socio-economic x test) were significant on the Self-Worth (p = .01) and Blind (p = .05) Scales. Further analysis utilizing covariance techniques failed to uncover any differences in responses as a function of age.

TABLE 31

F TEST CALCULATED FROM THREE-WAY ANALYSES OF VARIANCE ON PROJECTIVE AND DIRECT APPLICATIONS OF SCALES

Source of Variance	Object of Inquiry				
	Self-Worth	Negro	Blind	Cerebral Palsied	Stutterer
B (Sex)	5.0*	13.2***	35.7***	30.6***	26.6***
D (Test)	421.4***	239.1***	147.1***	134.7***	161.6***
BD (Sex x Test)	N.S.	8.5**	N.S.	N.S.	9.7**
ACD (Age x Socio-economic x Test)	5.0**	N.S.	N.S.	N.S.	N.S.

* = .05; ** = .01; *** = .001

All other main effects and interactions effects were nonsignificant.

(b) Hypothesis XII

Hypothesis XII stated there would be significant differences in test responses between male and female subjects. The data in Table 31 contain the relevant information.

Sex differences were significant at the .05 level on the Self-Worth Scale. The four remaining scales were significant at the .001 level of significance. The following table contains summary, descriptive data for the sex groups. In each case, males exhibited higher mean

scores (more negative) than female subjects.

Covariance procedures were employed to explore further the significant sex differences. For this analysis, the projective test was treated as a dependent variable. The covariate, or independent variable, was the direct test. Controlling for direct test influences did not uncover any meaningful differences in the projective responses. Corrected mean values were congruent with the means derived from the analysis of variance, and served to support the hypothesis that differences exist between male and female subjects in relation to socially conflicted objects of inquiry. The following table presents the summary data for the hypothesis under investigation.

TABLE 32

MALE, FEMALE, AND TOTAL GROUP MEANS AND STANDARD DEVIATIONS FOR PROJECTIVE AND DIRECT SCALES*

Test	Sex	Self-Worth	Negro	Blind	Cerebral Palsied	Stutterer	Total
Projective	Male N=128	4.2 1.74	5.6 2.90	3.9 2.13	4.1 2.18	6.1 2.29	24.0 11.24
	Female N=184	3.8 1.67	4.0 2.87	2.6 1.85	2.9 1.87	4.4 2.60	17.7 10.86
	Total N=312	4.0 1.71	4.7 2.98	3.1 2.06	3.4 2.10	5.1 2.63	20.3 11.48
Direct	Male N=128	1.5 1.30	2.0 2.29	2.1 1.91	2.4 1.82	3.6 2.42	11.4 9.74
	Female N=184	1.3 1.28	1.5 1.89	1.2 1.28	1.4 1.42	2.7 2.30	8.0 8.17
	Total N=312	1.4 1.29	1.7 2.07	1.6 1.63	1.8 1.66	3.1 2.39	9.6 9.04

*Upper left-hand corner of cell contains mean value.
Lower right-hand corner of cell contains standard deviation score.

(c) Hypothesis XIII

Hypothesis XIII stated there would be significant differences between upper, middle, and lower socio-economic levels. The data did not support the hypothesis. No differences were evidenced in scale responses as a function of socio-economic differences.

Scale Characteristics

Discussion of Item Responses

For the majority of items, shifts between private and public testings were systematic and supported the major research hypothesis. Direct responses to the Stutterer Scale were contrary to this general pattern. When analyzing Stutterer Scale responses, both nonsignificant and significant differences in a direction contrary to the hypothesized expectation were revealed. This phenomenon was limited to one or two items on three of the scales in contrast to five items on the Stutterer Scale. Items will be examined individually prior to discussing the possible factors responsible for the unexpected pattern of Stutterer Scale responses.

(a) Self-Worth Scale

Seven out of eight items on the Self-Worth Scale were statistically significant in the predicted direction. The single exception was item 42, which stated, "Every time they didn't invite Angela to the party, she . . ." The matched item on the direct test stated, "Every time they don't invite me to the party, I . . ."

The X^2 value for the college group did not attain significance. High school and combined group totals yielded p values of .01 and .05, respectively, in a direction contrary to the hypothesized expectation. Out of 270 subjects who were negative on the private test, a majority of the subjects (N = 152) remained negative on the public test. Typical negative responses included, ". . . felt hurt . . . cried . . . felt upset . . . was unhappy . . . became angry. . . ." Close to one-half of the subjects did not view the expression of negative reactions as contrary to normative expectations. The college group was less negative on the direct test than the high school group. This suggests that the younger age group may be more sensitive to being excluded from social activities. Furthermore, for the high school student, the open expression of negative feelings is probably not in conflict with the adolescent's definition of normative behavioral expectations. Very likely, the college student shares the same attitude regarding exclusion from social activities, but normative expectations may differentially influence the college student and cause him to censor the public expression of these attitudes.

(b) Negro Scale

Directional expectations between the projective and direct test responses were satisfied for college, high school, and total groups. Chi square and p values were significant for all items.

(c) Blind Scale

One item on the blind scale gave rise to contradictory results between each of the three test groups. Item 12 stated, "If Joyce had to

choose between going to a school that had blind students in it, or one that didn't have blind students, she . . ." The matched direct item stated, "If I had to choose between going to a school that had blind students in it, or one that didn't have blind students, I . . ." Responses of the college group were significant ($p = < .02$) in the predicted direction. Responses of the high school group were significant ($p = < .05$) in a direction contrary to the hypothesized expectation. When the two groups were combined, the significant differences canceled out. The most conservative explanation relates to the frequency of contact that nonblind and blind individuals experience in educational settings. On the college level, it is not unusual to see blind students. Conversely, the regular public school system is less likely to contain blind students. Typical negative responses of high school subjects included, ". . . stayed home . . . remained clear of the blind school . . . became upset . . . was concerned . . . would ask someone else to choose . . . didn't want to choose . . ." The quality of the responses suggests an attitude of avoidance. In addition, one gets the impression that the subjects believed that schools containing blind and nonblind students are inferior to schools that exclude blind students.

(d) Cerebral Palsy Scale

Two items (60, 63) failed to attain statistical significance in the predicted direction. Item 60 on the projective questionnaire stated, "When Dale heard that a cerebral palsied student was trying out for the modern dance club, she . . ." The matched item on the direct test stated, "When I heard that a cerebral palsied student was trying out for the

modern dance club, I . . ." College group responses were significant ($p = < .05$) in a direction contrary to the hypothesized expectation. For high school and total groups, shifts were nonsignificant between public and private responses. Out of 137 subjects who were negative on the projective test, a majority (N = 79) remained negative on the public test. Typical responses included ". . . was amazed . . . laughed . . . was shocked . . . said 'oh no' . . . felt like crying . . . did not believe it . . . felt sick . . . joined a different club." Direct negative responses ranged from attitudes of disbelief and pity to expressions of ridicule and avoidance. Negative expressions on the public test indicated that a sizeable portion of subjects have strong beliefs concerning the assumed limitations associated with the condition of cerebral palsy.

Item 63 was significant for all three groups in a direction contrary to the hypothesized expectation. The projective item stated, "If Viola saw a cerebral palsied person drool while he was talking, she . . ." The matched direct item stated, "If I saw a cerebral palsied person drool while he was talking, I . . ." Total group responses were significant ($p = < .001$) in a direction contrary to the hypothesized expectation. Out of 164 subjects who were negative on the projective test, a significant portion (N = 106) remained negative on the direct test. Typical responses were, ". . . looked away . . . felt bad . . . felt sick . . . turned away . . . felt disgusted . . . felt embarrassed . . . felt sorry for him." This item provoked a strong aversive reaction for a sizeable portion of subjects. The use of the word "drool"

may have unduly influenced the subjects to react negatively. The responses to this item may reflect reactions to social prohibitions regarding "drooling" rather than the expression of attitudes toward the cerebral palsied. On the other hand, one might argue that there is a lack of information regarding a possible problem associated with the condition of cerebral palsy, i.e., specific neuromuscular deficits that may cause involuntary drooling. Thus, negative responses on the public questionnaire may primarily be related to a lack of information rather than general intolerance toward various acts deemed hygienically or visually inappropriate. The most reasonable statement to make is that the item is ambiguous and may be measuring factors other than attitudes toward the cerebral palsied.

(e) Stutterer Scale

Over-all responses to the Stutterer Scale were highly inconsistent when compared to the previous scales. A sizeable portion of items on the Stutterer Scale were either nonsignificant or significant in a direction contrary to the hypothesized expectation. Items will be analyzed individually prior to discussing the total scale. Item 18 on the projective questionnaire stated, "If Donna heard a public speaker begin to stutter, she . . ." The matched direct item stated, "If I heard a public speaker begin to stutter, I . . ." Chi square values for college ($p = < .001$), high school ($p = < .05$), and total groups ($p = < .01$) were significant in a direction contrary to the hypothesized expectation. Out of 228 subjects who were negative on the projective test, 138 remained negative on the direct test. Typical responses included, ". . . felt uncomfortable

. . . became nervous . . . became uneasy . . . became apprehensive . . . felt embarrassed . . . felt sad." A sizeable portion of the negative responses indicated feelings of discomfort. These kinds of feelings are probably not subject to strong normative prohibitions. Whether one might call this an expression of negative attitudes is debatable. The writer's point of view would identify these expressions as being mildly negative. A second cluster of responses consisted of expressions of ridicule or avoidance. Not a few subjects indicated they would leave the situation. Item 22 was evaluated as statistically nonsignificant for all three groups. Out of 213 individuals who were negative on the projective test, 115 remained negative on the direct test. The projective item stated, "When Betty heard her new teacher begin to stutter, she . . ." The matched direct item stated, "When I heard my new teacher begin to stutter, I . . ." Typical responses included, "became nervous . . . felt embarrassed . . . felt sorry for her . . . looked away . . . laughed . . . was upset . . . transferred . . . felt angry . . . felt disappointed . . . changed teachers." Negative attitudes ranged from expressions of personal discomfort and pity to expressions of hostility and avoidance. One cluster of negative responses were characterized by overly sympathetic attitudes that often bordered on pity. Two items (31, 43) dealt with stutterers being admitted to debate and drama clubs. The projective item (31) stated, "When a stutterer tried out for the drama club, Lillian . . ." The matched direct item stated, "When a stutterer tried out for the drama club, I . . ." Responses for the high school group were nonsignificant. Results for the college ($p = < .01$)

and total group ($p = < .01$) were significant in a direction contrary to the hypothesized expectation. Out of 172 subjects who were negative on the projective test, 106 remained negative on the direct test. Typical responses included, ". . . was dubious . . . voted against her . . . knew she wouldn't be any good . . . laughed . . . tried not to laugh . . . never thought she would make it . . . changed clubs . . . became upset." The related projective item stated, "When a stutterer applied for membership in the debate club, Phyllis . . ." The matched direct item stated, "When a stutterer applied for membership in the debate club, I . . ." The item was statistically nonsignificant for all three test groups. Out of 143 subjects who were negative on the projective test, 70 remained negative on the direct test. Typical negative responses included, ". . . felt sorry . . . laughed . . . scorned her . . . wouldn't let her in . . . changed clubs . . . voted against her . . . felt irritated." Responses to both items suggest that a sizeable portion of the subjects believed that performing activities involving oral speech are beyond the capabilities of any individual identified as having a stuttering problem. Item 36 stated, "When the salesman began to stutter as he answered Sandra's question about cost, Sandra . . ." The matched direct item stated, "When the salesman began to stutter as he answered my question about cost, I . . ." Nonsignificant differences were observed for all three groups. Typical negative responses included, ". . . helped him on words . . . rephrased the question . . . became impatient . . . wished he had asked someone else . . . laughed . . . walked away in disgust . . . said he wasn't interested . . . became nervous . . . interrupted him." Nega-

tive responses reflected attitudes of "helping" to feelings of irritation and anger.

Summary Discussion Concerning Item Responses

The number of ambiguous items on the Self-Worth, Negro, Blind, and Cerebral Palsy Scales amounted to a small proportion of the total number of items being studied. Conversely, responses to the Stutterer Scale were characterized by marked differences in the response characteristics of the various items. In contrast to other scales, responses to the Stutterer Scale were typified by a relative lack of shift from negative, projective responses to positive direct responses. Direct responses were often contrary to the assumed normative expectation. Inspection of the items indicates that various roles (teacher, public speaker, salesperson) and various kinds of speaking activities (drama, debate) contain normative expectations of "non-deviant" communication ability. The introduction of a stutterer in these roles and activities was openly rejected by a sizeable portion of the test subjects. No social sanction is invoked when individuals openly express hostility toward the possibility of having a teacher who stuttered, listening to a public speaker who stuttered, or being involved with a salesperson who stuttered. Similarly, subjects felt able to express negative responses toward permitting a stutterer to join a debate or drama club. The underlying assumption seems to be that stuttering is a speech disorder that markedly interferes with the ability of individuals to engage in various jobs, roles, or speaking activities. No consideration of differences in severity, or

variability associated with different situations, people, and places was evidenced.

Roles and situations which are not explicitly identified with speaking skill requirements tend to be subjected to the same normative expectations that were evidenced in the previous scales. Item 11 was a significant at the .001 level for the total group. The item stated, "When a stutterer came to the party, Janet . . ." The matched direct item stated, "When a stutterer came to the party, I . . ." Out of 186 subjects who were negative on the projective test, 130 shifted to a positive response on the direct test. Another item (57) that performed in a similar fashion stated, "If Peggy's brother decided to marry a stutterer, Peggy . . ." The p value for differences was significant at the .001 level. Out of 76 subjects who were negative on the projective test, 69 shifted to a positive response on the direct test. A third item (37) also attained the .001 level of significance. The projective item stated, "When Jayne had to choose between voting for someone who stuttered or someone who didn't, she . . ." The direct item stated, "When I had to choose between voting for someone who stuttered or someone who didn't, I . . ." Out of 134 subjects who responded negatively on the projective test, 85 shifted to a positive response on the direct test. The remaining two items dealt with the reaction of subjects to discovering that a blind date stuttered, and making a decision about doing homework with a stutterer or non-stutterer. Both items were significant in the predicted direction at the .01 level.

For approximately half of the Stutterer Scale items, a consider-

able portion of the subjects felt they could openly express a negative attitude without being at variance with their definition of social expectations. To a considerable degree, a sizeable proportion of subjects reacted negatively to an individual being involved in activities associated with speaking skills.

Items that shifted in an expected direction appear to be "non-speech" oriented, i.e., there is minimal normative expectation requiring adequate or superior speaking skills. For these items, subjects responded in the anticipated fashion. Systematic shifts occurred between projective and direct responses. The change was from negative responses indicative of prejudicial attitudes to positive responses that were congruent with social expectations.

Reliability of Scales

Inter-item reliability coefficients were computed for each scale on the projective and direct questionnaires. Kuder-Richardson Formula 20 was utilized to evaluate reliability. Data for this aspect of the analysis are presented in the following table.[1]

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[1]The Kuder-Richardson Formula 20 is symbolized by the following equation: $r_{tt} = \left(\frac{n}{n-1}\right)\left(\frac{\sigma_t^2 - \Sigma pq}{\sigma_t^2}\right)$

See Anastasi, op. cit., p. 109.

TABLE 33

INTER-ITEM RELIABILITY COEFFICIENTS OF PROJECTIVE AND DIRECT SCALES
(N = 312)

Name of Scale	Reliability Coefficients	
	Projective Test	Direct Test
Self-Worth	.52	.46
Negro	.81	.77
Blind	.66	.44
Cerebral Palsy	.62	.61
Stutterer	.74	.73

The Kuder-Richardson Formula 20 provides a lower-bound estimate of reliability. The resultant coefficient represents an average of all possible split-half coefficients. Variable item discrimination levels in conjunction with a relatively small number of items per scale have been cited as influences that adversely affect the K-R 20 reliability coefficient. All test scales contained a relatively small number of items. Item discrimination levels demonstrated more variability for the Self-Worth, Blind, and Cerebral Palsy Scales than for the Stutterer and Negro Scales. This condition held for both projective and direct test administrations. There is no categorical answer to how high a reliability coefficient should be for a particular investigation. Cronbach's statement regarding this issue is pertinent to this discussion.

> As to how high reliability coefficients should be, no hard and fast rules can be stated. For research purposes, one can

> tolerate much lower reliabilities than one can for practical purposes of diagnosis and prediction. We are frequently faced with the choice of making the best of what reliability we can get, even though it may be of the order of only .50, or going without the use of the test at all. For some purposes, even a test of low reliability adds enough prediction to justify its use, particularly when used in a battery, along with other tests.[1]

The Stutterer and Negro Scales demonstrated satisfactory inter-item reliability coefficients. Reliability coefficients for the Blind, Cerebral Palsy, and Self-Worth Scales were considerably lower. Individual item discriminations on these three scales were more variable than item discriminations evidenced on the Stutterer and Negro Scales. In light of the above factors, the resultant reliability coefficients were deemed acceptable for this particular investigation.

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[1]Lee J. Cronbach, Essentials of Psychological Testing (New York: Harper & Row, Publishers, 1960), pp. 388-389.

CHAPTER VI

SUMMARY AND CONCLUSIONS

Introduction

The main purpose of this investigation was to explore public and private attitudes toward the handicapped. The central hypothesis stated there would be systematic and predictable differences between private (covert) and public (overt) responses to matched, direct-projective questionnaires that deal with socially conflicted objects of inquiry, which are defined as objects of social inquiry for which there is a normative social expectation of "right" and "wrong" responses, but the expectation has not been meaningfully internalized by large sections of the population. The objects of inquiry chosen for research included expressed attitudes toward Self-Worth, the Negro, Blind, Cerebral Palsied, and Stutterer. It was hypothesized that a substantial number of individuals hold private attitudes toward these objects of inquiry that sharply contrast with their public pronouncements toward the same objects of inquiry. A secondary focus of this investigation dealt with the influence of social status, age, and sex in relation to attitudes held toward the objects of inquiry.

Summary of Major Findings

Socially Conflicted Objects of Inquiry

Four of the five objects of inquiry varied in the expected

direction. The results supported the hypothesis that Self-Worth, Negro, Blind, and Cerebral Palsied are socially conflicted objects of inquiry. Projective and direct responses to these objects of inquiry behaved in the expected fashion. Negative, projective responses were systematically distorted in the direction of positive social expectations on the direct questionnaire. In addition, subjects who responded positively on the projective questionnaire usually responded with a positive response on the direct questionnaire.

Results did not support the hypothesis that the stutterer is a socially conflicted object of inquiry. Only 55 per cent of the negative, projective responses were changed to positive responses on the direct test. For approximately half of the stutterer scale items, a considerable portion of the subjects felt they could openly express a negative attitude without being in opposition to normative social expectations. It appeared that when the test item contained an expectation about speaking skills, some subjects openly reacted negatively to the inclusion of a stutterer in the speech role. Items that were not "speech oriented" behaved in the expected manner--with systematic shifts occurring between projective and direct questionnaire responses. Summary data for each object of inquiry are presented below.

(a) Self-Worth as the Object of Inquiry

The change to be expected was from the personal hypotheses of incompetence (negative projective responses) to expressed reactions of competence (positive direct responses). Seven of the eight items yielded chi-square values that were significant beyond the .001 level. Thus, for

seven of the eight items the responses shifted from negative, self-devaluating statements on the projective questionnaire to positive, self-enhancing statements on the direct questionnaire.

(b) The Negro as the Object of Inquiry

The change to be expected was from the personal hypotheses of prejudice (negative projective responses) to expressed reactions of tolerance (positive direct responses). Nine of the ten items yielded chi-square values that were significant beyond the .001 level. Responses to these items shifted from negative, intolerant expressions on the projective questionnaire to positive, non-prejudicial expressions on the direct questionnaire.

(c) The Blind as the Object of Inquiry

The change to be expected was from the personal hypotheses of prejudice (negative projective responses) to expressed reactions of tolerance (positive direct responses). Eight items yielded chi-square values that were significant beyond the .001 level. One item was significant at the .02 level. Thus, for nine of the ten items the responses shifted from negative, prejudicial responses on the projective questionnaire to positive, tolerant responses on the direct questionnaire.

(d) The Cerebral Palsied as the Object of Inquiry

The change to be expected was from the personal hypotheses of prejudice (negative projective responses) to expressed reactions of tolerance (positive direct responses). Seven items yielded chi-square

values that were significant beyond the .001 level. One item was significant at the .02 level. Responses to these items shifted from negative, intolerant expressions on the projective questionnaire to positive, tolerant expressions on the direct questionnaire.

(e) The Stutterer as the Object of Inquiry

The change to be expected was from the personal hypotheses of prejudice (negative projective responses) to expressed reactions of tolerance (positive direct responses). Only five items out of ten were significant in the predicted direction. The remaining items were either nonsignificant, or significant in a direction contrary to the hypothesized expectation. The results failed to confirm the hypothesized expectation between personal hypotheses and expressed reactions in relation to the stutterer.

Socially Neutral Object of Inquiry

The previous results confirmed the expected interrelationship between projective and direct responses to socially conflicted objects of inquiry. The data supported the hypothesis for four of five objects of inquiry. Responses to projective and direct questionnaires varied in a systematic fashion. An important question concerned itself with the conditions under which there would be minimal variation between projective and direct responses. The hypothesis chosen for this phase of the investigation stated there would be minimal, nonsignificant changes occurring between projective and direct responses when the question was socially neutral, i.e., an object of inquiry for which there is no

normative social expectation of "right" and "wrong" responses. Chi-square values were clearly nonsignificant for males, females, and the total group. The results supported the hypothesis that responses to socially neutral objects of inquiry do not vary significantly between projective and direct levels of responding.

Summary

Systematic variation and lack of variation were demonstrated in relation to socially neutral and socially conflicted objects of inquiry. When responses to socially conflicted objects of inquiry were analyzed, systematic variations between projective and direct responses were uncovered. Conversely, when the socially neutral object of inquiry was analyzed, minimal variations between projective and direct responses were observed. Variations between testings were primarily attributable to the experimental manipulations employed during test administrations. F ratios for differences between testings were strikingly significant beyond the .001 level. The data support the thesis that projective test responses reflect the private attitude domain, while direct test responses reflect the public attitude domain.

The Relationship of Age, Sex, and Socioeconomic Status on Attitudes Toward the Objects of Inquiry

Two strategies were used to investigate the intervening effects of age, sex, and socioeconomic status on the projective-direct dimensions. In the first place, the two administrations of the scales can be considered as two trials under varying conditions. (As indicated previously, F ratios for differences between the two administrations were

strikingly significant beyond the .001 level.) Subjects can then be broken down into three levels of classification, and the three-way analysis of variance with repeated measurements can be used to best estimate the effects of various sources of variance.

Secondly, the responses to the administration of the scales requiring direct responses can be considered as a control (co-variant) for the projective responses and the latter can be used as a basis for comparing levels of classification such as age and sex. In this approach the question being asked is what are the differences between groups on projective responses when the differences between groups on direct responses are held constant or statistically equated.

The first step in this two-phase analysis was to combine the three effects of age, sex, and socioeconomic status into one analysis so that the main and interaction effects could be tested together for each scale separately. Results indicated no significant differences between high school and college subjects in relation to the five test scales. No significant differences were uncovered in relation to upper, middle, and lower socioeconomic levels. Sex differences were significant at the .001 level. Interaction effects consisting of age x socioeconomic level x test were revealed for the Self-Worth Scale ($p = .01$) and the Blind Scale ($p = .05$). All other interactions involving age and socioeconomic level were nonsignificant. Interaction effects consisting of sex x test were revealed for the Negro ($p = .01$) and Stutterer ($p = .01$) scales. No other interaction effects involving sex were significant.

These outcomes suggested the need for further exploration of age

and sex differences utilizing an analysis of co-variance technique. For this phase of the analysis the projective test was treated as a dependent variable. The co-variate, or independent variable, was the direct test. The question being asked is what are the differences between projective responses when the differences between males and females on direct responses are held constant or statistically equated. Controlling for direct test influences failed to uncover other sources of variance contributing to the differences between males and females. Corrected mean values were congruent with the means derived from the analysis of variance and served to support the hypothesis that differences exist between male and female subjects in relation to socially conflicted objects of inquiry. In each case, males exhibited more negative scores than female subjects.

Results of the analysis of variance failed to uncover any differences between college and high school age subjects. This outcome suggested the need to employ a refined age breakdown for the co-variance analysis in order to maximize the possibility of uncovering meaningful age differences in projective test responses. For this analysis, subjects were grouped into six age intervals (15, 16, 17, 18, 19, and 20+ years). Results of co-variance analysis for age failed to uncover any significant differences. Controlling for direct test influences failed to uncover any variations in projective test responses for the six age categories that were studied.

Summary of Intercorrelations Between the Objects of Inquiry

(a) Self-Worth in Relation to the Negro, Blind, Cerebral Palsied, and Stutterer

The data supported the hypothesis that responses on the Self-Worth Scale would be positively correlated to the remaining objects of inquiry. Projective scale correlations ranged from .40 to .51. Direct correlations between the Self-Worth Scale and the remaining scales were also positive and ranged from .30 to .35.

(b) The Negro in Relation to the Blind, Cerebral Palsied, and the Stutterer

The data supported the hypothesis that responses on the Negro Scale would be positively correlated with responses to each of the disability scales. Projective scale correlations ranged from .60 to .66. Direct scale correlations between the Negro and the disability scales were also positive and ranged from .42 to .46.

(c) The Relationship Between the Blind, Cerebral Palsied, and Stutterer Scales

The data failed to support the hypothesis that there would be significant differences between the degree of relationship between each of the disability scales on the projective level. The three projective intercorrelations ranged between .60 and .66. Direct scale intercorrelations ranged between .50 and .60.

Conclusions Evidenced by the Investigations

Introduction

Since it was not possible to employ randomized procedures to select subjects, an attempt was made to maximize intersubject variation

along age and sex dimensions. The major replication involved the analysis of two different age groups (college and high school). Sex and social status replication was also built into the study. While the outcomes of this investigation cannot be generalized uncritically to population parameters, there is evidence to suggest that the findings may have some degree of generality, especially in light of the less than ideal test conditions that prevailed for some of the subjects. Conclusions evidenced by the investigation are presented below.

Conclusions

1. Analyses of the Negro, Blind, Cerebral Palsy, and Self-Worth Scale responses revealed the presence of contradictory attitudes between projective and direct levels. This finding supports the contention by Barker et al. that while public attitudes toward the handicapped are mildly favorable, indirect evidence suggests that deeper, unverbalized attitudes are frequently hostile.[1] This observation was supported by this investigation. In addition, the results offered convincing evidence that both direct and projective techniques should be included in the study of attitudes toward socially-conflicted objects of inquiry.
2. The stutterer is not a socially conflicted object of inquiry. Minimal variation occurred between projective and direct test responses. This lack of significant variation was due to the inclusion of five items that were "speech oriented," i.e.,

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[1]Barker et al., op. cit., p. 85.

contained normative expectations of nondeviant speaking skills. Stutterer scale items that were not "speech oriented" behaved in the expected fashion. Negative responses on the projective questionnaire were systematically changed to positive responses on the direct questionnaire. The over-all pattern of responses to the Stutterer Scale supports Wright's observations concerning the similarities and differences between handicapped and ethnic minority groups. Wright noted that handicapped individuals do not receive group sanction that motivates them to engage in behavior highlighting their disability. In most instances, the handicapped individual is encouraged to appear as much like a non-disabled person as possible. Conversely, members of racial and ethnic minority groups are supported by their members to strive for goals that are unique to their group.[1] Responses to the Stutterer Scale on the direct questionnaire indicated strong rejection of the notion that stutterers could participate effectively in "speech-oriented" roles and activities. Thus, situations that might highlight the specific disability were openly rejected by a sizeable portion of the test subjects. Items that dealt with non-speech-oriented content were subjected to the same normative social expectations evidenced on the remaining test scales.

Responses to the Stutterer Scale were extremely hetero-

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[1] Wright, op. cit., p. 6.

geneous. Indeed, one could equate the variability of subject responses with the variability of characteristics found in the group identified by the label of "stutterer." Stutterers exist along a broad continuum of behavior. The variety of subject responses, in one sense, reflects the heterogeneity characterizing the Stutterer group.

3. Analyses of college and high school subjects failed to uncover any significant differences in relation to direct and projective test responses. There was a trend evidenced that merits discussion. Projective scale scores at successive one-year intervals of 15 through 20+ were fairly stable. Conversely, inspection of direct scale scores at successive one-year levels disclosed a pattern of decreasing mean scores (more positive) for the individual scales. One might speculate that by the age of 15 years, and quite possibly at an earlier age, internal attitudes toward various social issues are established and henceforth remain fairly stable. The intervening effects of increasing age on social attitudes may have minimal influence on the private attitude domain. As individuals grow older, they become more aware of normative expectations and prohibitions regarding "right" and "wrong" answers for various kinds of questions. Thus, the effects of age may be reflected in public level, while the private level may be fairly resistant to change by a certain age. This argument would be consistent with the vast majority

of research findings that reports a more positive attitude on the part of older school-age children compared to younger school-age children. These findings may actually represent the superior (age effects) ability of older children to discern the normative expectations and prohibitions regarding certain questions and issues and to respond accordingly. Age change, at least in this investigation, was manifested on the direct scales, with a relative lack of change revealed on the projective scales.

4. No significant relationships were uncovered between upper, middle, and lower socioeconomic levels in relation to each of the direct and projective scales. In this investigation social status was derived by ranking subjects into upper, middle, or lower classes on the basis of their parents' occupations. Future investigations of the intervening effects of social class on attitudes toward disabilities should employ a more rigorous social class index than was utilized in the present investigation.
5. Male subjects were significantly more negative than female subjects on each of the direct and projective test scales. This finding is in agreement with previous research on sex differences in relation to social attitudes. Female scores were more positive (lower mean score) than male scores on both the projective and direct test scales.
6. Moderate, positive intercorrelations were evidenced between

all test scales on both the direct and projective questionnaires. Higher intercorrelations were evidenced between the projective scales than between the direct scales. This finding indicates that better predictions are possible with projective score data than with direct score data.

7. When there was an absence of normative social expectations concerning "right" and "wrong" answers, no significant variations were evidenced between projective and direct responses to the same question. This outcome strengthened the theoretical relevance of the systematic intra-subject variation demonstrated in response to socially conflicted objects of inquiry. Thus, predictable intra-subject variation and lack of variation was exhibited as a function of kind of question being posed, i.e., socially neutral or socially conflicted.
8. The investigation successfully demonstrated the presence of inter-individual variance on the projective-direct stratums. This variance contained a sex component that was manifested for all test scales on the projective and direct levels. A second major source of variation was the predictable presence and absence of intra-individual variance in relation to the nature of the question being asked, i.e., socially neutral v. socially conflicted. With the exception of the Stutterer Scale, the remaining test scales were particularly successful in measuring inter-individual variations along the projective-direct dimension, and intra-individual variation

and lack of variation with respect to the kind of question being asked, i.e., socially neutral v. socially conflicted. The disability scales, with the exception of the Stutterer Scale, appear to work sufficiently well to be useful in survey and experimental research. The test instruments have, as their most serious flaws, an insensitivity to age and social class variation, but nevertheless work effectively over the projective-direct dimension.

Recommendations for Further Research

Measurement and Design Considerations

1. Additional analyses of the Blind, Cerebral Palsy, and Stutterer Test Scales should be conducted. Individual scales should be increased in length.
2. The effects of different kinds of test instructions should be explored. In addition, the effects of variations in the order of test administrations should be systematically investigated.
3. Future investigations should include other classes of data collection techniques in order to compare the relationship of projective-direct questionnaire data with data derived from different measurement strategies. E. J. Webb recently stated:

> Most students today would agree that it is appropriate to draw simultaneously on multiple measures of the same attribute or construct--

> multiple measures hypothesized to overlap in theoretically relevant components, but which do not overlap on measurement errors specific to individual methods.[1]

The response of subjects to various labels (i.e., stutterers, cerebral palsy, blind) may cause them to respond to nominal identifying stimuli. These responses should not be uncritically interpreted as being representative of behaviors likely to occur in real life situations. The meaningfulness of questionnaire data is not being questioned here, rather the inherent weakness associated with sole reliance on one class of data collection methodology. Overlapping operationalisms are needed in order to cancel out identifiable sources of research invalidity associated with particular classes of data collection methodology. In relation to reactive measurement invalidity, Webb has stated:

> To bring under control some of the reactive measurement effect, we might employ data classes which do not require the cooperation of the student or respondent. By supplementing standard interview or pencil-and-paper measures, more dimensionality is introduced into triangulation.[2]

This type of strategy is particularly relevant to the investigation of socially conflicted objects of inquiry.

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[1]Address by Eugene J. Webb of Northwestern University, entitled "Unconventionality, Triangulation, and Inference," delivered at the Invitational Conference on Testing Problems, Hotel Roosevelt, New York City, sponsored by the Educational Testing Service, October 29, 1966, p. 34.

[2]Ibid., p. 35.

4. An attempt should be made to extend the paired, direct-projective questionnaire technique to other groups of subjects selected on a random basis. The measurement tactic seems especially well suited to the classroom setting. One promising strategy would involve random sampling of intact classrooms.
5. Future investigations should include a larger number of socially neutral objects of inquiry than did the present investigation.

Substantive Needs

1. Attitudes toward other disability groups should be investigated utilizing the projective-direct questionnaire technique.
2. A more rigorous index of social-class standing should be utilized in the exploration of social-class variation toward the handicapped.
3. The influence of age on attitudes toward disabilities should be subjected to further research. Focusing on age levels from 8 to 16 might provide valuable data concerning the developmental interrelationship between public and private attitude domains.
4. The relationship between information about disabilities and attitudes toward disabilities should be explored further.
5. The attitudinal effects of contacts between handicapped and non-handicapped individuals should be investigated.

6. Action research should be conducted on the elementary school level geared toward the modification of attitudes toward the physically handicapped.

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APPENDIX A

SCORING GUIDES

SCORING GUIDE: SELF-COMPETENCE SCALE

1. Most jobs with responsibility made Elizabeth feel . . .

Positive	Negative
Proud	Inferior
Grown up	Depressed
Important	Insecure
Like she accomplished something	Inadequate
As if she were challenged	Very sad
That she could be trusted	Frightened
Good	As if she would be inadequate
Very happy	Fearful
Secure	Like quitting
Capable	Uneasy
Responsible	Bad
Much older for her years	Unsure
More like working	Angry

SCORING GUIDE: SELF-COMPETENCE SCALE

2. When Florence thought the job was too much for her, she . . .

Positive	Negative
Simply dug in	Resigned
Tried harder	Refused to finish the work
Kept working	Complained to the manager
Rested and tried again	Would black out and cry
Spoke to her superior	Left to find another
Asked for help	Cried
Said so	Stopped working
Asked to be transferred	Went home
Tried again	Quit
Kept at it	Gave two weeks' notice

SCORING GUIDE: SELF-COMPETENCE SCALE

5. When Nora had something to say and others were around, she . . .

Positive	Negative
Said it	Spoke very softly
Made sure everyone listened	Didn't talk
Joined the conversation	Held back until they left
Was sure to be heard	Whispered quickly
Didn't hesitate	Could not say much
Spoke loudly	Said it quietly
Spoke concisely	Kept it to herself
Waited until the opportunity arose	Beckoned me to a corner
Spoke confidently	Stuttered
Talked	Got tongue-tied

SCORING GUIDE: SELF-COMPETENCE SCALE

13. When Myrna saw others doing better than she, Myrna . . .

Positive	Negative
Decided to try harder	Started to fumble
Tried harder	Cried
Did not give up	Was dismayed
Applied greater effort	Was jealous
Decided to study harder	Became upset
Rested and tried again	Was discouraged
Decided to do her best	Became frustrated
Buckled down	Felt thwarted
Persevered	Became angry
Kept at it	Quit
Wouldn't surrender	Was disgusted
Tried harder to achieve	Felt nervous

SCORING GUIDE: SELF-COMPETENCE SCALE

20. When told she would have to do the whole thing by herself, Madeline . . .

Positive	Negative
Completed the task	Was irritated
Assumed the responsibility	Felt self-conscious
Made plans to organize	Felt frightened
Found out how to do it	Was unsure
Sighed and set out to do it	Became apprehensive
Set about with determination	Refused
Made out a plan	Became unhappy
Was delighted	Quit
Felt good	Didn't do it
Agreed	Didn't think she could do it
Began working	Became angry
Accepted the challenge	Didn't think she could do it

SCORING GUIDE: SELF-COMPETENCE SCALE

28. When Tanya thought the odds were against her, she . . .

Positive	Negative
Tried harder	Quit
Didn't care	Gave up
Worked even harder	Withdrew
Bolstered up and carried on	Got mad
Gave it one more try	Was very unhappy
Was determined to succeed	Bottled up
Fought onward	Didn't know what to do
Persisted	Cried
Planned the attack	Quit the game

SCORING GUIDE: SELF-COMPETENCE SCALE

34. Working with others all the time made Kim . . .

Positive	Negative
Happy	Nervous
More sociable	A little uneasy
A broad-minded person	Mad
Content	Angry
Easy to get along with	Jumpy
Cooperative	Unhappy
Sociable	Annoyed
More efficient	Irritable
Feel good	Upset
Happy and enthusiastic	Leery of his ability
Congenial	Uneasy

SCORING GUIDE: SELF-COMPETENCE SCALE

42. Every time they didn't invite Angela to the party, she . . .

Positive	Negative
Went somewhere else	Swore revenge
Made her own party	Sunk into a depression
Stayed home	Felt hurt
Didn't care	Cried
Wondered why	Crashed it
Thought about it	Got angry
Went out	Became very sad
Didn't think about it	Felt very upset
Watched TV	Was unhappy
Called her friend	Felt neglected
Read a good book	Was offended
Felt good	Felt bad

SCORING GUIDE: NEGRO SCALE

6. When Joan saw Negroes moving in next door, she . . .

Positive	Negative
Went over to greet them	Worried about selling the house
Made a house call	Decided to move
Was eager to meet them	Quickly called her husband
Greeted them	Moved away
Reacted in a friendly manner	Called the real estate agent
Was glad the area was integrated	Was upset
Welcomed them	Left quickly
Thought nothing of it	Sold her house
Called them	Felt a knowing panic
Was pleased	Laughed

SCORING GUIDE: NEGRO SCALE

9. When they put a Negro forelady over her, Jane . . .

Positive	Negative
Continued her usual pace	Became uneasy
Didn't mind	Was annoyed
Was pleased	Quit her job
Thought "what progress"	Felt hurt
Followed her instructions	Resigned her job
Continued her good work	Rebelled
Thought it was best	Worked faster
Listened to her	Watched cautiously
Respected her	Was angry
Didn't think about it	Cried

SCORING GUIDE: NEGRO SCALE

15. When Laura discovered the school she was planning to enter was half Negro, she . . .

Positive	Negative
Felt good	Deliberated
Felt at home	Was disappointed
Was interested	Asked her parents to move
Didn't care	Asked to be transferred
Did nothing	Left
Did not change	Didn't go
Felt challenged	Felt badly
Wondered how it would be	Regretted the thought
Decided to go	Cried
Welcomed the opportunity	Became scared

SCORING GUIDE: NEGRO SCALE

19. When Wanda saw her younger sister dancing with a Negro, she . . .

Positive	Negative
Did nothing	Gasped
Was happy	Took her home
Watched	Was upset
Was proud of her sister	Was surprised
Admired them dancing	Cringed
Wanted to dance	Did not like it
Thought nothing of it	Telephoned her mother
Ignored it	Smacked her
Began dancing	Broke it up
Was pleased	Wondered why

SCORING GUIDE: NEGRO SCALE

26. When Arlene saw the doctor they were trying to give her was a Negro, she . . .

Positive	Negative
Made no fuss	Became apprehensive
Went into the office	Ran away
Didn't care	Asked for another
Accepted it	Was a little unhappy
Didn't mind	Left the emergency room
Approved	Refused
Allowed him to examine her	Was angry
Had great respect for him	Was scared
Thought nothing of it	Laughed
Was glad to see a Negro doctor	Doubted if he was very good

SCORING GUIDE: NEGRO SCALE

33. When her favorite beauty shop began being used by Negroes, Barbara . . .

Positive	Negative
Decided to keep going	Went to another
Continued going there	Got a new shop
Still went there	Told her friends about it
Was pleased	Was angry
Did not change	Became disturbed
Said "so what"	Quit going
Was glad	Became unhappy
Didn't think about it	Got sick
Was happy	Became anxious
Was proud	Felt worried

SCORING GUIDE: NEGRO SCALE

43. When Negroes began being admitted to the club, Evelyn decided . . .

Positive	Negative
To stick with it	To drop out
To renew her membership	To resign from her office
To stay in	To move to another city
The Board finally has some sense	To leave
It was about time	To quit
She wanted to join too	To leave and join another club
To continue her membership	There would be trouble
It was good	To fight it
To do nothing about it	It was wrong
She was pleased	To withdraw

SCORING GUIDE: NEGRO SCALE

48. When the boss began hiring many Negroes, Alice . . .

Positive	Negative
Continued working	Decided to quit
Felt it was about time	Stayed as long as the work lasted
Worked as before	Was worried
Did not care	Refused to work with Negroes
Didn't mind	Quit
Did not say anything	Worked to keep her job
Thought better of him	Cried
Just minded her own business	Became apprehensive
Was pleased	Expected to be fired
Kept working	Became discouraged

SCORING GUIDE: NEGRO SCALE

51. When they put a Negro to work next to her, Elka . . .

Positive	Negative
Didn't mind	Cried
Treated her equally	Worried about her work
Made friends	Was upset
Thought nothing of it	Thought she might be fired
Introduced herself	Quit
Was friendly	Became silent
Continued working	Became angry
Ignored her	Started to argue
Enjoyed her company	Left
Tried to be polite	Tried not to react

SCORING GUIDE: NEGRO SCALE

55. When Annette saw a Negro and white involved in an accident, she naturally blamed the . . .

Positive	Negative
Neither	Negro
One who was wrong	Car with the Negroes
Less competent driver	Negro--of course
Reckless driving habits of both	Negro--since he was wrong
Person who caused it	Negro--since they cause trouble
One who was responsible	Negro--since she almost saw it
Poor road conditions	Negro driver

SCORING GUIDE: BLIND SCALE

8. When Mary heard that a blind person wanted to come to her school, she . . .

Positive	Negative
Arranged a tour	Was sad
Was delighted	Felt sorry for him
Was happy	Decided to go elsewhere
Arranged to meet her	Would quit
Wouldn't think twice about it	Wouldn't go to the school
Wouldn't say anything	Avoided him
Wouldn't care	Was worried
Would assist	Was apprehensive
Said okay	Wanted to know what the school was coming to
Asked if he had a dog	Felt upset
Would welcome him	Was angry

SCORING GUIDE: BLIND SCALE

12. If Joyce had to choose between going to a school that had blind students in it, or one that didn't have blind students, she . . .

Positive	Negative
Would choose the best school	Remained clear of the blind school
Wouldn't care which	Chose the latter
Chose the school with the best curriculum	Would ask someone
Would choose the one best suited	Would have someone else choose
Wouldn't use blindness as a criterion	Stayed home
Didn't care	Went to the non-blind
Would go to either one	Became upset
Went with her friend	Worried about it
Chose the one with the highest rating	Didn't want to choose
Chose the easiest one	Was concerned

SCORING GUIDE: BLIND SCALE

16. If a blind person was introduced to Irma, she . . .

Positive	Negative
Would say "hello"	Felt uncomfortable
Would talk to him	Blushed
Spoke distinctly	Stammered
Acted the same	Felt bad
Placed her hand in his	Felt sorry for him
Was nice	Tried to hide her nervousness
Greeted him politely	Felt embarrassed
Shook hands	Was careful not to offend
Would be friendly	Felt scared
Thought nothing of it	Didn't know what to do

SCORING GUIDE: BLIND SCALE

24. If they put a blind person to work next to Charlotte, she . . .

Positive	Negative
Would aid him	Quit
Would be friendly	Was unhappy
Helped him	Was worried
Made friends	Became angry
Would continue working	Worried about her job
Helped if need	Felt uneasy
Was polite	Felt sorry for him
Introduced herself	Felt insulted
Said "hello"	Threatened to quit
Was helpful	Worried about her job

SCORING GUIDE: BLIND SCALE

30. When Kate saw a blind student in her class, she . . .

Positive	Negative
Spoke to him	Stared
Made friends	Was very curious
Introduced herself	Stared with amazement
Helped him	Was nervous
Talked to him	Cringed
Wanted to assist	Was surprised
Read to him	Nearly flipped
Was understanding	Was sorry
Was glad	Transferred classes
Kept on studying	Went home

SCORING GUIDE: BLIND SCALE

40. When Connie heard that a blind person had applied for membership in the swimming club, she . . .

Positive	Negative
Wondered about her ability	Joined another club
Was delighted	Was fearful
Voted for him to join	Thought she was stupid
Offered assistance	Laughed
Organized a help group	Quit the club
Respected the girl	Thought it was impossible
Wondered about her chances	Threatened to quit
Talked to the Director	Voted against her
Let her in	Knew she couldn't swim
Was glad	Thought it was strange

SCORING GUIDE: BLIND SCALE

45. When Mabel heard that her friend had stopped going out with the blind boy, she . . .

Positive	Negative
Asked why	Was relieved
Wondered why	Thought it was shameful
Did not pry	Was angry
Wondered why they split	Thought it was cruel
Was concerned	Thought it was mean
Figured it was their business	Was shocked
Did nothing	Was disgusted
Tried to find out why	Didn't like it
Hoped it wasn't because of the blindness	Felt unhappy for the blind boy
Didn't care	Cried

SCORING GUIDE: BLIND SCALE

50. When Marilyn saw the teacher she was getting was blind, she . . .

Positive	Negative
Was interested	Had doubts
Was eager	Felt badly
Felt admiration	Did not like it
Studied as always	Was surprised
Offered to help him get to know about the school	Wanted to change her class
Was happy about it	Was unhappy
Didn't mind	Felt sad
Kept the course	Felt she would not learn much
Looked forward to a new experience	Cried
Wondered what difference it made	Was embarrassed

SCORING GUIDE: BLIND SCALE

58. When a blind student called Penny up for help with the homework, Penny . . .

Positive	Negative
Helped him	Refused
Was helpful	Ignored the call
Offered help	Refused to leave the seat
Agreed	Hung up
Obliged	Did not go
Gave it to him	Cried
Was certain how to help	Answered angrily
Felt pleased	Gave an excuse
Answered the questions	Felt annoyed
Said okay	Got rid of him

SCORING GUIDE: BLIND SCALE

62. If Georgia's brother decided to marry a blind girl, Georgia . . .

Positive	Negative
Would like her	Would renounce him
Would approve	Was upset
Would be bridesmaid	Would be apprehensive
Would be glad	Would die
Wouldn't be concerned	Was worried
Wouldn't mind	Was astonished
Minded her own business	Felt sorry
Was happy	Tried to stop it
Wished them luck	Was shocked
Was enthused	Would feel hostile

SCORING GUIDE: CEREBRAL PALSY SCALE

4. If Dot heard that a cerebral palsied student wanted to come into her class, she . . .

Positive	Negative
Wouldn't care	Would quit
Welcomed him	Felt embarrassed
Met him	Felt funny
Offered assistance	Didn't like it
Was cooperative	Would object
Didn't think anything about it	Was shocked
Thought it was a good idea	Would get cold all over
Kept working	Complained
Said "hello"	Objected
Thought it was okay	Would try to leave

SCORING GUIDE: CEREBRAL PALSY SCALE

21. When Gloria told Maureen that she thought cerebral palsied students should go to their own school, Maureen . . .

Positive	Negative
Objected	Agreed
Had to disagree	Said "yes"
Would not talk to her	Told her she was right
Explained why they shouldn't	Laughed
Argued with her	Said it was right
Told her she was crazy	Agreed wholeheartedly
Gave Gloria her views	Was happy
Told her it was wrong	Was glad
Didn't agree	Knew it was best
Got angry at her	Said the same thing

SCORING GUIDE: CEREBRAL PALSY SCALE

27. When Elaine had to choose between a cerebral palsied job applicant and one that wasn't cerebral palsied, she . . .

Positive	Negative
Weighed their qualifications	Chose the handicapped
Chose the better worker	Chose the nonhandicapped
Looked at all the qualifications	Chose the one that wasn't cerebral palsied
Chose the best suited	Couldn't choose
Evaluated both	Fainted
Took the better one	Chose the cerebral palsied because she was helping people
Picked the best	Thought twice
Gave the cerebral palsied an equal chance	Became nervous
Chose on merit	Became angry
Tested both applicants	Was kind to the cerebral palsied one

SCORING GUIDE: CEREBRAL PALSY SCALE

35. When a cerebral palsied student called Marion up for help with the homework, Marion . . .

Positive	Negative
Invited him over	Refused
Was helpful	Hung up
Gave the answers	Ignored the call
Was willing to help	Said she was busy
Was happy	Answered in a mad tone
Offered any time	Did not go
Went to his house	Became nervous
Said okay	Almost laughed
Helped	Told him to call someone else
Offered to come over	Was worried

SCORING GUIDE: CEREBRAL PALSY SCALE

39. When Tina heard that a cerebral palsied person wanted to join her club, she . . .

Positive	Negative
Didn't mind	Voted against it
Told him he could	Refused
Offered assistance	Rejected the poor student
Was happy	Dropped out
Made the new member happy	Quit
Was in favor	Didn't want him
Checked his qualifications	Got disgusted
Said okay	Joined another club
Asked to meet her	Felt like quitting
Was glad	Was stunned

SCORING GUIDE: CEREBRAL PALSY SCALE

44. If the boss began hiring cerebral palsied workers where Marisue worked, Marisue . . .

Positive	Negative
Continued working	Would quit
Wouldn't care	Thought the boss was soft
Welcomed them	Got angry
Tried to help out	Became annoyed
Helped them get acquainted	Would be out of a job
Did not object	Might quit
Made new friends	Would give notice
Accepted it	Would feel more superior
Said okay	Became nervous
Read about cerebral palsy	Thought she would be fired
Thought nothing of it	Disliked it
Kept working	Avoided them
Stayed on the job	Found a new job

SCORING GUIDE: CEREBRAL PALSY SCALE

47. If Rosalie found out that a cerebral palsied student was applying to the same school as she was, she . . .

Positive	Negative
Was interested	Would complain
Wouldn't care	Went to another school
Did nothing	Quit
Wouldn't feel any different	Was shocked
Still applied	Laughed
Wouldn't mind	Frowned
Couldn't care less	Transferred
Was glad	Cried
Thought nothing of it	Became upset
Would be pleased	Avoided her
Was glad	Almost quit

SCORING GUIDE: CEREBRAL PALSY SCALE

54. If Edith found out that a cerebral palsied person had applied for the same job that she wanted, she . . .

Positive	Negative
Hoped she got it	Was indignant
Didn't say anything	Withdrew her application
Would wish her luck	Tried to lose
Hoped they both had the same chance	Looked for another
Did not withdraw	Wouldn't apply
Showed no concern	Didn't believe it
Still competed	Would be angry
Kept trying	Would feel weird
Wondered who would get it	Laughed
Didn't think twice about it	Would cry

SCORING GUIDE: CEREBRAL PALSY SCALE

60. When Dale heard that a cerebral palsied student was trying out for the modern dance club, she . . .

Positive	Negative
Was pleased	Was amazed
Was happy	Laughed
Helped the student	Was shocked
Joined	Thought it was funny
Offered her services	Said "oh no"
Minded her own business	Decided to quit
Gave her credit	Felt like crying
Wondered how she would manage	Did not believe it
Accepted her	Felt sick
Voted "yes"	Joined a different club

SCORING GUIDE: CEREBRAL PALSY SCALE

63. If Viola saw a cerebral palsied person drool while he was talking, she . . .

Positive	Negative
Would give him a hanky	Looked away
Ignored it	Felt bad
Tried not to notice it	Felt sick
Didn't mention it	Turned away
Told him in a nice way	Felt disgusted
Kept talking	Threw up
Sat there	Laughed
Overlooked it	Felt embarrassed
Didn't think anything of it	Felt sorry for him
Kept listening	Almost fainted

SCORING GUIDE: STUTTERING SCALE

11. When a stutterer came to the party, Janet . . .

Positive	Negative
Made him feel at home	Made fun of him
Let him in	Laughed
Talked to him	Felt sorry
Greeted him	Left
Said, "so what"	Shied away from him
Showed him around	Mocked him
Said hello	Mimicked him
Treated him the same	Went home
Didn't notice he stuttered	Got angry
Put him at ease	Was stunned

SCORING GUIDE: STUTTERING SCALE

18. If Donna heard a public speaker begin to stutter, she . . .

Positive	Negative
Listened	Felt uncomfortable
Would do nothing	Became nervous
Would listen	Became uneasy
Listened patiently	Became apprehensive
Would think he was nervous	Felt embarrassed
Would overlook it	Shut the speaker out
Disregarded it	Would leave
Listened attentively	Laughed
Felt his predicament	Would look sad
Tried to ignore it	Did not want to stay

SCORING GUIDE: STUTTERING SCALE

22. When Betty heard her new teacher begin to stutter, she . . .

Positive	Negative
Didn't care	Became nervous
Listened carefully	Felt embarrassment
Decided she was probably nervous	Felt sorry for her
Sat quietly	Looked away
Sat at ease	Laughed
Listened	Was upset
Did nothing	Transferred
Kept writing	Felt angry
Listened to what she said	Looked disappointed
Hoped others didn't mind	Changed teachers

SCORING GUIDE: STUTTERING SCALE

25. If Helen found out that her blind date stuttered, she . . .

Positive	Negative
Didn't care	Would become tense
Was patient	Would not go out with him
Didn't mind	Broke the date
Talked in a relaxed manner	Would not talk to him
Was understanding	Felt bad for him
Examined other qualities	Felt uneasy
Did nothing special	Never dated him again
Listened to him talk	Laughed at him
Did not pay any attention to it	Went home early
Still went out with him	Felt bad

SCORING GUIDE: STUTTERING SCALE

31. When a stutterer tried out for the drama club, Lillian . . .

Positive	Negative
Commended him	Thought "how sad"
Thought "good for you"	Discouraged him
Applauded	Voted against him
Helped him with his speech	Knew he wouldn't be any good
Helped coach him	Laughed
Gave him a chance	Tried not to laugh
Let him in	Never thought he'd make it
Accepted him	Hoped they didn't let him in
Voted him in	Changed clubs
Felt it would help him	Became upset

SCORING GUIDE: STUTTERING SCALE

36. When the salesman began to stutter as he answered Sandra's question about cost, Sandra . . .

Positive	Negative
Waited	Blushed
Waited for him to finish	Helped him on words
Was patient	Rephrased her question
Showed no impatience	Became impatient
Felt kindly toward him	Wished she had asked someone else
Continued to listen	Laughed
Didn't say anything	Walked away in disgust
Didn't notice	Said she wasn't interested
Listened	Became nervous
Was polite	Interrupted him

SCORING GUIDE: STUTTERING SCALE

37. If Jayne had to choose between voting for someone who stuttered or someone who didn't, she . . .

Positive	Negative
Chose the best qualified	Would choose the latter
Picked the best one	Voted for the one who didn't
Didn't really care	Gave the stutterer a chance
Didn't consider the stuttering	Laughed at the stutterer
Considered other factors	Would choose the stutterer
Voted for the best looking	Thought it was a joke
Simply chose the best one	Picked the stutterer
Voted on personalities	Was uneasy
Looked at their qualifications	Couldn't vote for the stutterer
Didn't let that influence her	Became annoyed

SCORING GUIDE: STUTTERING SCALE

46. When a stutterer applied for membership in the debate club, Phyllis . . .

Positive	Negative
Volunteered to help him	Was dubious
Encouraged him	Felt sorry
Gave him a chance	Laughed
Was in favor	Scorned him
Gave him credit	Refused to allow it
Thought it was a good idea	Wouldn't let him in
Said okay	Wondered how he could do it
Let him in	Changed clubs
Hoped he was good	Voted against him
Admitted him	Felt irritated

SCORING GUIDE: STUTTERING SCALE

53. If Neysa had to choose between doing the homework assignment with someone who stuttered and someone who didn't, she . . .

Positive	Negative
Chose the best one	Chose the one who didn't
Chose the one she liked best	Became worried
Chose the smartest	Would not know what to do
Wouldn't let this influence her	Laughed
Saw who could help the most	Would never choose the stutterer
Chose her friend	Knew the stutterer couldn't do it
Chose the friendliest	Couldn't stand the stutterer
Didn't consider the stuttering	Put cotton in her ears
Picked the best student	Chose the former
Disregarded the stuttering	Avoided the stutterer

SCORING GUIDE: STUTTERING SCALE

57. If Peggy's brother decided to marry a stutterer, Peggy . . .

Positive	Negative
Would be helpful	Would be sorry
Would not interfere	Worried
Would become friends with her	Wouldn't go to the wedding
Thought he would be happy	Would laugh
Would approve	Wouldn't know what to do
Would be in the wedding	Would not like it
Wouldn't give it a second thought	Said "no"
Didn't care	Would be mad
Said "fine"	Would never visit
Would be thrilled	Would cry

APPENDIX B

INITIAL ITEM POOLS

1p. If Larry/Kathy found out that a cerebral palsied student was applying to the same school as he/she was, he/she . . .

1d. If I found out that a cerebral palsied student was applying to the same school as I was, I . . .

2p. When the cerebral palsied person made "thrashing" movements as she/he walked, Larry/Tina . . .

2d. When the cerebral palsied person made "thrashing" movements as she/he walked, I . . .

3p. When Jack/Tanya saw the cerebral palsied student wheeling herself/himself down the hallway, he/she . . .

3d. When I saw the cerebral palsied student wheeling herself/himself down the hallway, I . . .

4p. When Joe/Florence had to choose between a cerebral palsied job applicant and one that wasn't cerebral palsied, he/she . . .

4d. When I had to choose between a cerebral palsied job applicant and one that wasn't cerebral palsied, I . . .

5p. If Jerry/Connie found out that a cerebral palsied person had applied for the same job that he/she wanted, he/she . . .

5d. If I found out that a cerebral palsied person had applied for the same job that I wanted, I . . .

6p. When Dave/Diane saw the cerebral palsied person having difficulty chewing food, he/she . . .

6d. When I saw the cerebral palsied person having difficulty chewing food, I . . .

7p. When a cerebral palsied student called Burt/Nora up for help with the homework, Burt/Nora . . .

7d. When a cerebral palsied student called me up for help with the homework, I . . .

8p. If Carol/Tim saw a cerebral palsied student walking to the school assembly alone, she/he . . .

8d. If I saw a cerebral palsied student walking to the school assembly alone, I . . .

9p. If Hank/Donna saw a cerebral palsied person drool while she/he was talking, he/she . . .

9d. If I saw a cerebral palsied person drool while she/he was talking, I . . .

10p. When Mel/Gloria saw a cerebral palsied student walking with crutches and braces, he/she . . .

10d. If I saw a cerebral palsied student walking with crutches and braces, I . . .

11p. When Barbara heard that her girl friend had a baby who was cerebral palsied, she . . .

11d. When I heard that my girl friend had a baby who was cerebral palsied, I . . .

12p. If Barney/Sandra heard that a cerebral palsied student was coming into his/her class, he/she . . .

12d. If I heard that a cerebral palsied student was coming into my class, I . . .

13p. When Maureen/Don heard the cerebral palsied student begin to speak, she/he . . .

13d. When I hard the cerebral palsied student begin to speak, I . . .

14p. When Jay/Rosalie heard that a cerebral palsied student wanted to join his/her club, he/she . . .

14d. When I heard that a cerebral palsied student wanted to join my club, I . . .

15p. If the boss began hiring cerebral palsied workers where Joe/Marilyn worked, Joe/Marilyn . . .

15d. If the boss began hiring cerebral palsied workers where I worked, I . . .

16p. If Mary/Ken saw a cerebral palsied student trying to climb some stairs, she/he . . .

16d. If I saw a cerebral palsied student trying to climb some stairs, I . . .

17p. If Vic/Julia heard that a cerebral palsied person was going to apply for a driver's license, he/she . . .

17d. If I heard that a cerebral palsied person was going to apply for a driver's license, I . . .

18p. When Nora/Bruce saw a cerebral palsied person drinking a glass of milk with a straw, she/he . . .

18d. When I saw a cerebral palsied person drinking a glass of milk with a straw, I . . .

19p. When Lou/Madeline heard that a cerebral palsy student was trying out for the modern dance club, Lou/Madeline . . .

19d. When I heard that a cerebral palsy student was trying out for the modern dance club, I . . .

20p. When Roger/Sue told Frank/Charlotte that he/she thought cerebral palsied students should go to their own school, Frank/Charlotte . . .

20d. When someone told me that he/she thought cerebral palsied students should go to their own school, I . . .

21p. When Lois/Wayne saw a mother spanking her cerebral palsied child, Lois/Wayne . . .

21d. When I saw a mother spanking her cerebral palsied child, I . . .

22p. When the salesman began to stutter as he answered Mary's question about cost, she . . .

22p. When the saleslady began to stutter as she answered John's question about cost, he . . .

22d. When the saleslady/salesman began to stutter as she/he answered my question about cost, I . . .

23p. If Joan/Jim had to choose between voting for someone who stuttered and someone who didn't, she/he . . .

23d. If I had to choose between voting for someone who stuttered and someone who didn't, I . . ;

24p. When a stutterer came to the party, Janice/Sonny . . .

24d. When a stutterer came to the party, I . . .

25p. If Roy/Virginia answered the phone and the other person started stuttering, Roy/Virginia . . .

25d. If I answered the phone and the other person started stuttering, I . . .

26p. When Larry saw the boy begin to stutter as he asked the girl for a date, Larry . . .

26p. When Clara saw the boy begin to stutter as he asked the girl for a date, Clara . . .

26d. When I saw the boy begin to stutter as he asked the girl for a date, I . . .

27p. When the teacher skipped over the student because he/she stuttered, Vera/Tony . . .

27d. When the teacher skipped over the student because he/she stuttered, I . . .

28p. When the stutterer tried out for the Drama Club, Mary/Jim . . .

28d. When the stutterer tried out for the Drama Club, I . . .

29p. If Mort's/Sara's sister/brother decided to marry a stutterer, Mort/Sara . . .

29d. If my sister/brother decided to marry a stutterer, I . . .

30p. If Janice/Al heard a public speaker begin to stutter, she/he . . .

30d. If I heard a public speaker begin to stutter, I . . .

31p. If Mary saw her girl friend dancing with a stutterer, she . . .

31p. If Leo saw his buddy dancing with a stutterer, he . . .

31d. If I saw my girl friend/buddy dancing with a stutterer, I . . .

32p. If Jack/Stephanie had trouble getting out a word (stuttered), Dorothy/Wayne . . .

32d. If a stutterer had trouble getting out a word (stuttered), I . . .

33p. When a stutterer applied for membership in the debate club, Bill/Cora . . .

33d. When a stutterer applied for membership in the debate club, I . . .

34p. When Walter/Wanda heard that a stutterer wanted to become a lawyer, he/she . . .

34d. When I heard that a stutterer wanted to become a lawyer, I . . .

35p. When the student began to stutter as she/he answered the question, Gordon/Ruth . . .

35d. When the student began to stutter as she/he answered the question, I . . .

36p. When Eugene/Amy heard his/her new teacher begin to stutter, he/she . . .

36d. When I heard my new teacher begin to stutter, I . . .

37p. If Dick/Paula found out that his/her blind date stuttered, he/she . . .

37d. If I found out that my blind date stuttered, I . . .

38p. If Mark/Helen had to choose between going to the prom with a girl/boy who stuttered or not going to the prom, he/she . . .

38d. If I had to choose between going to the prom with a boy/girl who stuttered or not going to the prom, I . . .

39p. If Jim/Jane, who stuttered, had to choose between going to the discussion group and speaking, or staying home and listening to the discussion on the radio, he/she . . .

39d. If I stuttered and had to choose between going to a discussion group and speaking, or staying home and listening to the discussion on the radio, I . . .

40p. When Frank/Sherry asked for directions and the person began to stutter as she/he answered, Frank/Sherry . . .

40d. When I asked for directions and the person began to stutter as she/he answered, I . . .

41p. When Al's/Irene's father/mother began to stutter, Al/Irene . . .

41d. When my father/mother began to stutter, I . . .

42p. If Paul/Mary had to choose between doing the homework assignment with someone who stuttered or someone who didn't stutter, Paul/Mary . . .

42d. If I had to choose between doing the homework assignment with someone who stuttered or someone who didn't, I . . .

43p. When a blind student came to the school dance, Jim/Carol . . .

43d. When a blind student came to the school dance, I . . .

44p. If Paul/Kim heard that a blind student was coming to his/her high school, he/she . . .

44d. If I heard that a blind student was coming to my high school, I . . .

45p. When Erick heard that his buddy was going to marry a blind girl, he . . .

45p. When Laura heard that her girl friend was going to marry a blind boy, she . . .

45d. When I heard that my buddy/girl friend was going to marry a blind girl/boy, I . . .

46p. If Joyce/Saul had to choose between going to a school that had blind students in it, or one that didn't have blind students, she/he . . .

46d. If I had to choose between going to a school that had blind students in it, or one that didn't have blind students, I . . .

47p. If they put a blind person to work next to Jerry/Ellie, he/she . . .

47d. If they put a blind person to work next to me, I . . .

48p. When Eunice/Will saw a blind student in her/his class, she/he . . .

48d. When I saw a blind student in my class, I . . .

49p. When Beverly/Raymond saw the teacher she/he was getting was blind, she/he . . .

49d. When I saw that the teacher I was getting was blind, I . . .

50p. If Ben/Arlene found out that he/she was going to be blind in six months, he/she . . .

50d. If I found out that I was going to be blind in six months, I . . .

51p. When Art heard that his buddy had stopped going out with the blind girl, he . . .

51p. When Adele heard that her girl friend had stopped going out with the blind boy, she . . .

51d. When I heard that my buddy/girl friend had stopped going out with the blind girl/boy, I . . .

52p. If Scott/Gretl saw a blind man standing at a busy intersection, he/she . . .

52d. If I saw a blind man standing at a busy intersection, I . . .

53p. When Arthur/Ava heard that a blind student was class valedictorian, he/she . . .

53d. When I heard that a blind student was class valedictorian, I . . .

54p. When Ralph/Marie introduced a blind acquaintance to his/her friends, he/she . . .

54d. When I introduced a blind acquaintance to my friends, I . . .

55p. If Bob/Margie saw a blind beggar on the street, he/she . . .

55d. If I saw a blind beggar on the street, I . . .

56p. When Albert/Sharon heard that a blind student had traveled all alone from the other side of town to get to school, he/she . . .

56d. When I heard that a blind student had traveled all alone from the other side of town to get to school, I . . .

57p. When Bob/Bertha read the newspaper story about a thief holding up a blind person, he/she . . .

57d. When I read the newspaper story about a thief holding up a blind person, I . . .

58p. When Jake/Jennie used the word "blind" as he/she was talking with a blind person, Victor/Marlene . . .

58d. If someone used the word "blind" as they were talking with a blind person, I . . .

59p. When Harvey/Susan heard that a blind student had applied for membership in the swimming club, he/she . . .

59d. When I heard that a blind student had applied for membership in the swimming club, I . . .

60p. When Gloria/Warren heard that a blind student had been accepted for college, she/he . . .

60d. When I heard that a blind student had been accepted for college, I . . .

61p. When Clyde/Amy saw the man/woman reading the book with a thick magnifying glass, he/she . . .

61d. When I saw the man/woman reading the book with a thick magnifying glass, I . . .

APPENDIX C

SUMMARY OF COMMUNITIES CONTACTED

The following table presents rank-order information on the communities that were contacted.

TABLE 34

RANK-ORDER DESCRIPTIVE DATA OF COMMUNITIES CONTACTED

Town	Family Income	Male Grades	Population	% Nonwhite
Middleborough	1 1	3	1	2
Taunton	2	1	20	7
Salem	3	4	19	3
Malden	4	5	22	6
Methuen	5	2	14	2
Billerica	6	7	10	
Stoughton	7	9	8	
Tewksbury	8	6	7	
Beverly	9	11	17	2
Saugus	10	9	13	4
Medford	11	8	23	8
Watertown	12	10	18	1
Chelmsford	13	11	5	
Stoneham	14	12	9	3
Canton	15	12	3	
Burlington	16	13	4	
Melrose	17	13	16	2
Arlington	18	12	21	2
Natick	19	14	15	4
Andover	20	14	6	
Reading	21	14	11	1
Bedford	22	12	2	
Winchester	23	15	12	5

Comments Made by Superintendents,
Principals, Guidance Directors, and
Other School Officials

(S--Superintendent; P--Principal;
G.D.--Guidance Director; O--Other
School Official)

S. "I'm afraid we can't do anything like this--it's too time-consuming. Our school committee takes a dim view on anything that takes time away from the children. The school committee has denied many requests that have come up."

S. "We're too busy. We don't have many handicapped children."

P. ". . . What's in it for us. I really would feel guilty in asking the teachers to give up this time. . . . I can't see how I can justify the school system participating in this project."

P. "The parents would storm the school if we took part in this kind of project."

P. "If we take the students' time, we feel it should benefit the students or teachers. This would take time without any immediate feedback."

S. "This kind of project does not interest us. Our people [teachers] are so involved, we are at our wits end."

P. "I think this thing can be overdone. . . . If this was something the school could use. . . . I don't think we have that many handicapped students so that they are a concern one way or the other."

O. "We were told by our superintendent to make sure we got something in return."

P. "Any indication that the project is school-related would open up school responsibility. This would put the school in a bad position."

S. "The students are tested out."

P. "There isn't any value in this project for the students."

P. "There is a question about the reliability of your test. . . . It might be better to sample a number of students to indicate reliability. . . ."

Summary

It was decided to abandon efforts to secure a public school sample of 10th and 12th grade children as originally proposed. Some school officials declined to participate in the project because it would not generate data of an immediate, consumable nature. School officials appeared willing to consider the project only if it provided data desired by the school system. Some school officials expressed concern over the anticipated reaction of the school board and the community at large. Finally, the nature of the test items and the testing procedures acted as adverse stimuli for various school officials.

In summary, Kerlinger's remarks regarding research-school staff relations are appropriate to include at this point:

> The whole subject of research-school staff relations is too large a subject to discuss in this book. Besides, there are few set rules. Some advice may be helpful, however. The first person for the investigator to see is the chief administrative officer. If he is understanding and cooperative, half the problem is solved. But many administrators are not cooperative and understanding. In such cases, better abandon the school system--unless you have board of education influence. Next, it is good policy to get board of education approval, if he wishes to. Still, it is wise for the investigator to discuss the research directly with the board. Obviously, principals and teachers have to be consulted, too. Planned discussion sessions of representative board members, administrators, and teachers should be arranged if it is possible to do so. In short, the educational investigator, or at least one or more of his colleagues, has to be skilled in social relations. Neglect of this side of research can have unfortunate consequences. On the other hand, successful social relations can yield not only interest and cooperation; they can help the investigator learn a great deal about the school system and the community.[1]

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[1]Fred N. Kerlinger, Foundations of Behavioral Research: Educational and Psychological Inquiry (New York: Holt, Rinehart & Winston, Inc., 1964), p. 543.

APPENDIX D

INFORMATION SHEETS DESCRIBING

INITIAL RESEARCH PLAN

INFORMATION SHEET

I. Title

"An Investigation Into Public and Private Attitudes Held Toward Various Handicapped Groups: Stutterers; Cerebral Palsied; and Blind."

II. Statement of Main Purpose

To administer a paired, direct-indirect questionnaire (sentence completion test) to high school seniors and sophomores to determine their attitudes toward cerebral palsied, blind, and stuttering individuals.

III. Measures to Be Employed

A. California Scales

Thirty items selected from the Authoritarianism (F) Scale, Minority (M) Subscale, and Patriotism (P) Subscale.

B. Attitude Toward Disabled Persons (ATDP)

A twenty-item, Likert-type scale which has as one of its functions the measurement of the attitude of non-disabled persons toward the disabled.

C. Paired, Direct-Indirect Sentence-Completion Test

A sentence-completion test that is divided into two sections. The direct section utilizes incomplete sentence stems, written in the first person. No attempt is made to disguise the self-referent quality of the items. The indirect half of the questionnaire is disguised in that items are written in the third person form, and the test is presented to the respondents as a verbal speed test. Every item in the direct questionnaire portion of the test has a parallel item in the indirect half.

IV. Rationale: Paired, Direct-Indirect Completion Test

Form I ("The G. and S. Verbal Thinking Speed Test") is an indirect test in nature. The purpose of the test is to measure "private" attitudes toward blind, stuttering, and cerebral palsied individuals. The indirect quality of the test is provided for in two ways: First, the purpose of the test is disguised by identifying it as a "Verbal Thinking Speed Test." Written and oral instructions will stress the need to complete each incomplete sentence as quickly as possible. The subjects will be told that their marks will depend

upon completing all sentences as quickly and legibly as possible. Secondly, the construction of the items for this test will employ third-person references.

Example: When Bob saw he was getting a blind teacher, he _____

_____.

Two weeks after Form I has been administered, Form II ("The Personal and Social Attitudes Record") will be administered. The purpose of this test is to measure "public" attitudes toward blind, stuttering, and cerebral palsied individuals. The subjects are told the purpose of the test administration. Emphasis is placed on the fact that the test will be "An official measure of their personal and social attitudes." They are further told that the results will be placed on file in the records office. No emphasis on speed is given--rather the emphasis is on directing the subjects to complete the items as they apply to themselves. Personal pronouns are employed throughout the test.

Example: When I saw that I was getting a blind teacher, I _____

_____.

Filler items will be included in both forms. Only items dealing with blind, cerebral palsied, and stuttering individuals will be analyzed. Separate forms will be provided for male and female subjects.

V. Specific Problems Being Considered

A. To examine the relationships that exist between direct and indirect sentence-completion responses.

B. To analyze the relationship between public and private attitudes toward the handicapped in relation to attitudes held toward racial and ethnic minority groups and handicapped groups in general.

C. To analyze and discuss the relationship of the following sociocultural variables to attitudes held toward the handicapped groups being investigated; socioeconomic level; sex; and age.

D. To evaluate and analyze any possible differences in attitude that are expressed toward each of the three handicapped groups.

VI. Subjects and Test Setting

All sophomore and senior high school students will be tested. Testing will be conducted in homerooms. Measures will be administered by homeroom teachers.

VII. Sequences and Estimated Testing Time for Each Measure

Sequence of Administration	Approximate Testing Date	Estimated Length of Time for Administration
A. The thirty-item composite California Scale will be administered to sophomore and senior high school subjects.		20 minutes
B. Six weeks later the "G. and S. Verbal Thinking Speed Test" will be administered to subjects.		45 minutes
C. Two weeks later the "Personal and Social Attitudes Record" will be administered to subjects.		50 minutes
D. The "Attitude Toward Disabled Persons" will be administered to all subjects. The question of its place within the testing sequence has not yet been established.		15 minutes

VIII. Data Needed

A. Test scores from the administration of Form I and Form II.

B. Scores from the California F, M, and P Scales.

C. Scores from the ATDP.

D. Data on age, sex, and socioeconomic status to be derived from fact sheet on Form II.

E. Descriptive data concerning public school characteristics, e.g., total school population, ethnic composition, classroom size, curriculum offered, personnel services available, drop-out percentage, etc.

F. Social-ecological data concerning the city.

IX. Other Information

A. The California Scales and ATDP Scales are presented to subjects as a "Public Opinion Survey." Formal tester-training sessions are not necessary. Written instructions will be made available to test administrators. The California Scale Administration will be presented as a "one-shot affair" with no mention made of additional, related testing to be conducted in the future.

B. The validity of the investigation is crucially dependent upon the extent to which the purpose of the Form I ("G. and S. Verbal Thinking Speed Test") Test is misperceived by test subjects. If the intent of the test is not disguised, it is quite likely that an individual's answers will be strongly influenced by conscious and/or unconscious efforts to respond in a socially desirable manner--especially in an investigation that employs attitudes held toward the handicapped. Explicit written directions will be made available to all test administrators. One meeting of all testers should be held prior to the actual test session, to discuss the procedure and clarify any questions.

C. Two graduate students will assist the chief investigator in securing data.

X. Membership of the Research Advisory Committee

A. Dr. Albert T. Murphy -- Professor of Speech Pathology
Director of the Boston University Psycho-educational Clinic

B. Dr. Frank Garfunkel -- Professor, Department of Special Education at Boston University
Consultant in Survey Research and Design

C. Dr. Burton Blatt -- Chairman, Boston University Department of Special Education

D. Dr. Seymour B. Sarason--Visiting Lecturer, Boston University Department of Special Education
Director of Yale University Psycho-educational Clinic

INFORMATION SHEET

I. Title

"An Investigation into Public and Private Attitudes Held Toward Various Handicapped Groups: Stutterers, Cerebral Palsied, and Blind"

II. Statement of Main Purpose

To administer a free-response questionnaire (sentence-completion test) to high school seniors and sophomores to determine their attitudes toward cerebral palsied, blind, and stuttering individuals.

III. Measures to Be Employed

A. Free-Response Sentence-Completion Test

Form II utilizes incomplete sentence stems, written in the first person. No attempt is made to alter the self-referent quality of Form II items. Form I is altered, in that the items are written in the third person and the test is presented to the respondents as a verbal speed test. Every item in Form I has a parallel item in Form II. Filler items will be included in both forms. Only items dealing with blind, cerebral palsied, and stuttering individuals will be analyzed. Separate forms will be provided for male and female subjects.

B. Dogmatism Scale

The Dogmatism Scale is being employed to obtain an estimate of dogmatic thinking in relationship to attitudes expressed toward blind, stuttering, and cerebral palsied groups. The crucial question being asked is: will those individuals who score high on the Dogmatism Scale tend to be rejecting and negative toward the physically handicapped? Conversely, will those individuals who score low on the Dogmatism Scale tend to be acceptant and tolerant toward the physically handicapped? These two questions are further related to the issue of how specific or general prejudice is within individuals who express rejecting attitudes toward physically, visually, and communicatively handicapped groups.

IV. Specific Problems Being Considered

A. To examine the relationship between Form I and Form II responses.

B. To analyze the relationship between Form I and Form II attitude responses in relation to estimates of dogmatic thinking.

C. To analyze the influence of the following variables: sex, age, and socio-economic level.

D. To analyze any possible differences in attitude expressed toward each of the handicapped groups being studied.

V. Subjects and Test Setting

All sophomore and senior high school students will be tested. Testing sessions will be conducted in home rooms. Measures will be administered by home-room teachers.

VI. Testing Sequence and Estimated Time Required for Administration

Testing Sequence	Approximate Testing Date	Estimated Length of Test Administration
A. The "G. and S. Verbal Thinking Speed Test" will be administered to the subjects (Form IA, IB, and IC).	April 1965	30 minutes
B. Two weeks later, the "Personal and Social Attitudes Record" will be administered to the subjects (Form IIA, IIB, and IIC).	April 1965	35 minutes
C. Three weeks later, the "Dogmatism Scale" will be administered to the subjects.	May 1965	35 minutes

VII. Data Needed

A. Test scores from Forms IA, IB, IC, IIA, IIB, and IIC.

B. Dogmatism Scale responses.

C. Data on age, sex, and socio-economic status.

D. Descriptive data concerning public school characteristics, e.g., total school populations, ethnic composition, classroom size, curriculum offered, personnel services available, drop-out percentage, etc.

E. Social-ecological data concerning the city.

VIII. Other Information

A. The Dogmatism Scale is presented to subjects as a "Public Opinion Survey." Formal tester-training sessions are not necessary. Written instructions will be made available to test administrators.

B. Two graduate students will assist the chief investigator in securing data.

IX. Membership of the Research Advisory Committee

A. Dr. Albert T. Murphy: Professor of Speech Pathology. Director of the Boston University Psycho-educational Clinic.

B. Dr. Frank Garfunkel: Professor, Department of Special Education at Boston University. Consultant in survey research and design.

C. Dr. Burton Blatt: Chairman, Boston University Department of Special Education.

D. Dr. Seymour B. Sarason: Visiting Lecturer, Boston University Department of Special Education. Director of Yale University Psycho-educational Clinic.

E. Mr. Alexander J. Alexanian: Chief Investigator, currently a full-time doctoral candidate at the Boston University School of Education, Department of Special Education. Formerly Supervisor of the Massachusetts Memorial Hospital, Speech and Hearing Clinic.

APPENDIX E

QUESTIONNAIRES EMPLOYED IN PILOT STUDY

(Blind Questionnaires for Males and Females)

(Cerebral Palsy Questionnaires for Males and Females)

(Stutterer Questionnaires for Males and Females)

The G. and S. Verbal Thinking Speed Test (Form I)

Name: _____ Age: _____

Sex: Male _____ Female _____ Birth Date: _____

Date: _____ Grade: _____

This is a test of how fast you can think in sentences. Complete each of the following sentences so that it makes sense. You may use either a word or a phrase, although a phrase is preferable. Since you will have only a limited amount of time, work quickly. In most cases the best way to answer the test is to put down the first thing that comes to your mind after you read the beginning of the sentence. Do not worry about the spelling but write as quickly and as legibly as you can.

Example: When Al scored the goal, he _____

_____.

You could finish this sentence by writing: "was happy," or "wanted to score another," or "stopped playing and went home," or some other answer that makes sense.

DO NOT TURN THIS PAGE UNTIL YOU ARE TOLD TO BEGIN.

DO NOT SKIP ANY SENTENCES.

(1) The thing Mike liked to do best in his spare time was _____

_____

(2) After Frank finished talking he thought he _____

_____

(3) When Bob read the newspaper story about a thief holding up a blind person, he _____

(4) What Dick disliked most about his work was _____

_____

(5) If Scott saw a blind man standing at a busy intersection, he _____

_____

(6) When Jack thought the job was too much for him, he _____

_____

(7) When Clyde saw the man reading the book with a thick magnifying glass, he _____

_____

(8) When they asked Ed to be in charge, he _____

_____

(9) Sometimes Jack _____

(10) When Jake used the word "blind" as he was talking with a blind person, Victor _____

_____

(11) Joe feels happy when _____

_____

(12) George wanted to know _____

_____

(13) When Ralph introduced a blind acquaintance to his friends, he _____

_____

(14) If Bob saw a blind beggar on the street, he _____

_____

(15) Larry's schoolwork _____

_____

(16) Arnie felt happy when _____

_____

(17) Steve's greatest longing _____

_____

(18) When Albert heard that a blind student had traveled all alone from the other side of town to get to school, he _____

_____

(19) Gary's best friend _____

_____

(20) When Arthur heard that a blind student was class valedictorian, he

_____

(21) When Will saw a blind student in his class, he _____

_____

(22) Ben became embarrassed _____

_____

(23) Dave felt _____

_____

(24) When Harvey heard that a blind student had applied for membership in the swimming club, he _____

_____

(25) Harry's nerves _____

_____

(26) Jack's most important decision _____

_____

(27) Mel _____

_____

(28) When Raymond saw the teacher he was getting was blind, he _____

_____

(29) What pains Vin _____

_____

(30) Ken often thinks of himself as a _____

_____

(31) The reason Ralph tries to get ahead is _____

_____

(32) Ned believes most people think of him as _____

_____

(33) When Warren heard that a blind student had been accepted for college, he _____

_____

(34) When Jake had something to say and others were around, he _____

_____

(35) Like most boys, Andy sometimes thinks his friends are _____

_____

(36) When Art heard that his buddy had stopped going out with the blind girl, he _____

_____

(37) Most jobs with responsibility made Nick feel _____

_____

(38) From past experience, Roy felt most people were _____

_____

(39) Tim usually felt awkward when _____

_____

(40) If they put a blind person to work next to Jerry, he _____

_____

(41) What Ken's friends liked most about him was _____

_____

(42) Sometimes Eddie wishes that _____

_____

(43) Some of Keith's friends _____

_____

(44) If Saul had to choose between going to a school that had blind students in it, or one that didn't have blind students, he _____

_____

(45) Sometimes Mel worries about _____

_____

(46) After Ken finished the test, he thought that he _____

_____

(47) When Erick heard that his buddy was going to marry a blind girl, he _____

(48) When Alan saw others doing better than he, Alan _____

_____

(49) Lou feels most people who meet him for the first time think he is

_____

(50) If Ben found out he was going to be blind in six months _____

_____

(51) Dan thinks the things that make a person work hardest are _____

_____

(52) Rick sometimes thought his teacher _____

_____

(53) When a blind student came to the school dance, Jim _____

_____

(54) Vance often felt like _____

_____

(55) When told he would have to do the whole thing himself, Andy _____

_____

(56) If Paul heard that a blind student was coming to his high school, he _____

_____

(57) Pete feels most people don't reach their goals because of _____

_____

(58) Jerry believes his group thinks he is _____

_____

The G. and S. Verbal Thinking Speed Test (Form I)

Name: _____ Age: _____

Sex: Male _____ Female _____ Birth Date: _____

Date: _____ Grade: _____

This is a test of how fast you can think in sentences. Complete each of the following sentences so that it makes sense. You may use either a word or a phrase, although a phrase is preferable. Since you will have only a limited amount of time, work quickly. In most cases the best way to answer the test is to put down the first thing that comes to your mind after you read the beginning of the sentence. Do not worry about the spelling but write as quickly and as legibly as you can.

Example: When Al scored the goal, he _____

_____.

You could finish this sentence by writing: "was happy," or "wanted to score another," or "stopped playing and went home," or some other answer that makes sense.

DO NOT TURN THIS PAGE UNTIL YOU ARE TOLD TO BEGIN.

DO NOT SKIP ANY SENTENCES.

(1) The thing Mary liked to do best in her spare time was _____

_____

(2) After Florence finished talking she thought she _____

_____

(3) When Bertha read the newspaper story about a thief holding up a blind person, she _____

_____

(4) What Dot disliked most about her work was _____

_____

(5) If Gretl saw a blind man standing at a busy intersection, she ____

_____

(6) When Joan thought the job was too much for her, she _____

_____

(7) When Amy saw the woman reading the book with a thick magnifying glass, she _____

_____

(8) When they asked Elizabeth to be in charge, she _____

_____

(9) Sometimes Jane _____

_____

(10) When Jennie used the word "blind" as she was talking with a blind person, Mary _____

(11) Janet feels happy when _____

_____

(12) Joyce wanted to know _____

_____

(13) When Marie introduced a blind acquaintance to her friends, she ___

_____

(14) If Margie saw a blind beggar on the street, she _____

_____

(15) Laura's schoolwork _____

_____

(16) Irma felt happy when _____

_____

(17) Margie's greatest longing _____

_____

(18) When Sharon heard that a blind student had traveled all alone from the other side of town to get to school, she _____

_____

(19) Wanda's best friend _____

_____

(20) When Ava heard that a blind student was class valedictorian, she _

_____

(21) When Eunice saw a blind student in her class, she _____

_____

(22) Betty became embarrassed _____

_____

(23) Dianne felt _____

_____

(24) When Susan heard that a blind student had applied for membership in the swimming club, she _____

_____

(25) Helen's nerves _____

_____

(26) Jane's most important decision _____

_____

(27) Elaine _____

_____

(28) When Beverly saw the teacher she was getting was blind, she _____

_____

(29) What pains Vera _____

_____

(30) Kate often thinks of herself as a _____

_____

(31) The reason Lillian tries to get ahead is _____

_____

(32) Nancy believes most people think of her as _____

_____

(33) When Gloria heard that a blind student had been accepted for college, she _____

_____

(34) When Janet had something to say and others were around, she _____

_____

(35) Like most girls, Betty sometimes thinks her friends are _____

_____

(36) When Adele heard that her girl friend had stopped going out with the blind boy, she _____

_____

(37) Most jobs with responsibility made Nora feel _____

_____

(38) From past experience, Rachel felt most people were _____

_____

(39) Tina usually felt awkward when _____

_____

(40) If they put a blind person to work next to Ellie, she _____

_____

(41) What Stephanie's friends liked most about her was _____

_____

(42) Sometimes Elaine wishes that _____

_____

(43) Some of Evelyn's friends _____

_____

(44) If Joyce had to choose between going to a school that had blind students in it, or one that didn't have blind students, she _____

_____

(45) Sometimes Mabel worries about _____

_____

(46) After Madeline finished the test, she thought that she _____

_____

(47) When Laura heard that her girl friend was going to marry a blind boy, she _____

(48) When Alice saw others doing better than she, Alice _____

_____

(49) Jane feels most people who meet her for the first time think she is _____

(50) If Arlene found out that she was going to be blind in six months, she _____

_____

(51) Betty thinks the things that make a person work hardest are _____

_____

(52) Lois sometimes thought her teacher _____

_____

(53) When a blind student came to the school dance, Carol _____

_____

(54) Edith often felt like _____

_____

(55) When told she would have to do the whole thing herself, Annette ___

_____

(56) If Kim heard that a blind student was coming to her high school, she _____

_____

(57) Peggy feels most people don't reach their goals because of _____

_____

(58) Joan believes her group thinks she is _____

_____

The G. and S. Verbal Thinking Speed Test (Form I)

Name: _____ Age: _____

Sex: Male _____ Female _____ Birth Date: _____

Date: _____ Grade: _____

This is a test of how fast you can think in sentences. Complete each of the following sentences so that it makes sense. You may use either a word or a phrase, although a phrase is preferable. Since you will have only a limited amount of time, work quickly. In most cases the best way to answer the test is to put down the first thing that comes to your mind after you read the beginning of the sentence. Do not worry about the spelling but write as quickly and as legibly as you can.

Example: When Al scored the goal, he _____

_____.

You could finish this sentence by writing: "was happy," or "wanted to score another," or "stopped playing and went home," or some other answer that makes sense.

DO NOT TURN THIS PAGE UNTIL YOU ARE TOLD TO BEGIN.

DO NOT SKIP ANY SENTENCES.

The 6. and 8. Verbal Thinking Speed Test (Form 2)

Name: _____ Age: _____

Sex: Male _____ Female _____ Birth Date: _____

Date: _____ Grade: _____

This is a test of how fast you can think in sentences. Complete each of the following sentences so that it makes sense. You may use either a word or a phrase, although a phrase is preferable. Since you will have only a limited amount of time, work quickly. In most cases the best way to answer the test is to put down the first thing that comes to your mind after you read the beginning of the sentence. Do not worry about the spelling but write as quickly and as legibly as you can.

Example: When Al scored the goal, he _____

_____.

You could finish this sentence by writing: "was happy," or "wanted to score another," or "stopped playing and went home," or some other answer that makes sense.

DO NOT TURN THIS PAGE UNTIL YOU ARE TOLD TO BEGIN.

DO NOT SKIP ANY SENTENCES.

(1) The thing Mike liked to do best in his spare time was _____

_____

(2) After Frank finished talking he thought he _____

_____

(3) If Tim saw a cerebral palsied student walking to the school assembly alone, he _____

_____

(4) What Dick disliked most about his work was _____

_____

(5) When a cerebral palsied student called Burt up for help with the homework, Burt _____

_____

(6) When Jack thought the job was too much for him, he _____

_____

(7) When Mel saw a cerebral palsied student walking with crutches and braces, he _____

_____

(8) When they asked Ed to be in charge, he _____

_____

(9) Sometimes Jack _____

(10) If Vic heard that a cerebral palsied person was going to apply for a driver's license, he _____

_____

(11) Joe feels happy when _____

_____

(12) George wanted to know _____

_____

(13) If Ken saw a cerebral palsied student trying to climb some stairs, he _____

(14) When Joe had to choose between a cerebral palsied job applicant and one that wasn't cerebral palsied, he _____

_____

(15) Larry's schoolwork _____

_____

(16) Arnie felt happy when _____

_____

(17) Steve's greatest longing _____

_____

(18) If Hank saw a cerebral palsied person drool while he was talking, he _____

(19) Gary's best friend _____

_____

(20) When Lou heard that a cerebral palsied student was trying out for the modern dance club, Lou _____

_____

(21) When Don heard the cerebral palsied student begin to speak, he ___

_____

(22) Ben became embarrassed _____

_____

(23) Dave felt _____

_____

(24) When Roger told Frank that he thought cerebral palsied students should go to their own school, Frank _____

_____

(25) Harry's nerves _____

_____

(26) Jack's most important decision _____

_____

(27) Mel _____

_____

(28) When Mitch saw the cerebral palsied student wheeling herself down the hallway, he _____

_____

(29) What pains Vin _____

_____

(30) Ken often thinks of himself as a _____

_____

(31) The reason Ralph tries to get ahead is _____

_____

(32) Ned believes most people think of him as _____

_____

(33) When Mike heard that his buddy's wife had a baby who was cerebral palsied, he _____

_____

(34) When Jake had something to say and others were around, he _____

_____

(35) Like most boys, Andy sometimes thinks his friends are _____

_____

(36) If Barney heard that a cerebral palsied student was coming into his class, he _____

_____

(37) Most jobs with responsibility made Nick feel _____

_____

(38) From past experience, Roy felt most people were _____

_____

(39) Tim usually felt awkward when _____

_____

(40) If Jerry found out that a cerebral palsied person had applied for the same job that he wanted, he _____

_____

(41) What Ken's friends liked most about him was _____

_____

(42) Sometimes Eddie wishes that _____

_____

(43) Some of Keith's friends _____

_____

(44) When Bruce saw a cerebral palsied person drinking a glass of milk with a straw, he _____

_____

(45) Sometimes Mel worries about _____

_____

(46) After Ken finished the test, he thought that he _____

_____

(47) When Jay heard that a cerebral palsied student wanted to join his club, he _____

_____

(48) When Alan saw others doing better than he, Alan _____

_____

(49) Lou feels most people who meet him for the first time think he is _____

(50) If the boss began hiring cerebral palsied workers where Joe worked, Joe _____

(51) Dan thinks the things that make a person work hardest are _____

(52) Rick sometimes thought his teacher _____

(53) When Dave saw the cerebral palsied person having difficulty chewing food, he _____

(54) Vance often felt like _____

(55) When told he would have to do the whole thing himself, Andy _____

(56) If Larry found out that a cerebral palsied student was applying to the same school as he was, he _____

(57) Pete feels most people don't reach their goals because of _____

(58) Jerry believes his group thinks he is _____

_____

(59) When Wayne saw a mother spanking her cerebral palsied child, Wayne _____

(60) If Mack had any children, the one thing he would do for them is

_____

(61) When the cerebral palsied person made "thrashing" movements as she walked, Larry _____

_____

(62) When Nick thought the odds were against him, he _____

_____

(63) Sal would do anything in order to be _____

_____

The G. and S. Verbal Thinking Speed Test (Form I)

Name: _____ Age: _____

Sex: Male _____ Female _____ Birth Date: _____

Date: _____ Grade: _____

This is a test of how fast you can think in sentences. Complete each of the following sentences so that it makes sense. You may use either a word or a phrase, although a phrase is preferable. Since you will have only a limited amount of time, work quickly. In most cases the best way to answer the test is to put down the first thing that comes to your mind after you read the beginning of the sentence. Do not worry about the spelling but write as quickly and as legibly as you can.

Example: When Al scored the goal, he _____

_____.

You could finish this sentence by writing: "was happy," or "wanted to score another," or "stopped playing and went home," or some other answer that makes sense.

DO NOT TURN THIS PAGE UNTIL YOU ARE TOLD TO BEGIN.

DO NOT SKIP ANY SENTENCES.

(1) The thing Mary liked to do best in her spare time was _____

_____

(2) After Florence finished talking, she thought she _____

_____

(3) If Carol saw a cerebral palsied student walking to the school assembly alone, she _____

_____

(4) What Dot disliked most about her work was _____

_____

(5) When a cerebral palsied student called Nora up for help with the homework, Nora _____

_____

(6) When Joan thought the job was too much for her, she _____

_____

(7) When Gloria was a cerebral palsied student walking with crutches and braces, she _____

_____

(8) When they asked Elizabeth to be in charge, she _____

_____

(9) Sometimes Jane _____

_____

(10) If Julia heard that a cerebral palsied person was going to apply for a driver's license, she _____

_____

(11) Janet feels happy when _____

_____

(12) Joyce wanted to know _____

_____

(13) If Mary saw a cerebral palsied student trying to climb some stairs, she _____

_____

(14) When Florence had to choose between a cerebral palsied job applicant and one that wasn't cerebral palsied, she _____

_____

(15) Laura's schoolwork _____

_____

(16) Irma felt happy when _____

_____

(17) Margie's greatest longing _____

_____

(18) If Donna saw a cerebral palsied person drool while she was talking, she _____

_____

(19) Wanda's best friend _____

_____

(20) When Madeline heard that a cerebral palsied student was trying out for the modern dance club, Madeline _____

_____

(21) When Maureen heard the cerebral palsied student begin to speak, she _____

_____

(22) Betty became embarrassed _____

_____

(23) Dianne felt _____

_____

(24) When Sue told Charlotte that she thought cerebral palsied students should go to their own school, Charlotte _____

_____

(25) Helen's nerves _____

_____

(26) Jane's most important decision _____

_____

(27) Elaine _____

_____

(28) When Tanya saw the cerebral palsied student wheeling himself down the hallway, she _____

_____

(29) What pains Vera _____

_____

(30) Kate often thinks of herself as a _____

_____

(31) The reason Lillian tries to get ahead is _____

_____

(32) Nancy believes most people think of her as _____

_____

(33) When Barbara heard that her girl friend had a baby who was cerebral palsied, she _____

_____

(34) When Janet had something to say and others were around, she _____

_____

(35) Like most girls, Betty sometimes thinks her friends are _____

_____

(36) If Sandra heard that a cerebral palsied student was coming into her class, she _____

_____

(37) Most jobs with responsibility made Nora feel _____

_____

(38) From past experience, Rachel felt most people were _____

_____

(39) Tina usually felt awkward when _____

_____

(40) If Connie found out that a cerebral palsied person had applied for the same job that she wanted, she _____

_____

(41) What Stephanie's friends liked most about her was _____

_____

(42) Sometimes Elaine wishes that _____

_____

(43) Some of Evelyn's friends _____

_____

(44) When Nora saw a cerebral palsied person drinking a glass of milk with a straw, she _____

_____

(45) Sometimes Mabel worries about _____

_____

(46) After Madeline finished the test, she thought that she _____

_____

(47) When Rosalie heard that a cerebral palsied student wanted to join her club, she _____

_____

(48) When Alice saw others doing better than she, Alice _____

_____

(49) Jane feels most people who meet her for the first time think she is _____

(50) If the boss began hiring cerebral palsied workers where Marilyn worked, Marilyn _____

_____

(51) Betty thinks the things that make a person work hardest are _____

_____

(52) Lois sometimes thought her teacher _____

_____

(53) When Dianne saw the cerebral palsied person having difficulty chewing food, she _____

_____

(54) Edith often felt like _____

_____

(55) When told she would have to do the whole thing herself, Annette __

_____

(56) If Kathy found out that a cerebral palsied student was applying to the same school as she was, she _____

_____

(57) Peggy feels most people don't reach their goals because of _____

_____

(58) Joan believes her group thinks she is _____

_____

(59) When Lois saw a mother spanking her cerebral palsied child, Lois

_____

(60) If Marge had any children, the one thing she would do for them is

_____

(61) When the cerebral palsied person made "thrashing" movements as he walked, Tina _____

_____

(62) When Nan thought the odds were against her, she _____

_____

(63) Dot would do anything in order to be _____

_____

The G. and S. Verbal Thinking Speed Test (Form I)

Name: _____ Age: _____

Sex: Male _____ Female _____ Birth Date: _____

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This is a test of how fast you can think in sentences. Complete each of the following sentences so that it makes sense. You may use either a word or a phrase, although a phrase is preferable. Since you will have only a limited amount of time, work quickly. In most cases the best way to answer the test is to put down the first thing that comes to your mind after you read the beginning of the sentence. Do not worry about the spelling but write as quickly and as legibly as you can.

Example: When Al scored the goal, he _____

_____.

You could finish this sentence by writing: "was happy," or "wanted to score another," or "stopped playing and went home," or some other answer that makes sense.

DO NOT TURN THIS PAGE UNTIL YOU ARE TOLD TO BEGIN.

DO NOT SKIP ANY SENTENCES.

(1) The thing Mike liked to do best in his spare time was _____

_____

(2) After Frank finished talking he thought he _____

_____

(3) When a stutterer came to the party, Sonny _____

_____

(4) What Dick disliked most about his work was _____

_____

(5) When Frank asked for directions and the person began to stutter as she answered, Frank _____

_____

(6) When Jack thought the job was too much for him, he _____

_____

(7) If Jack had trouble getting out a word (stuttered), Wayne _____

_____

(8) When they asked Ed to be in charge, he _____

_____

(9) Sometimes Jack _____

_____

(10) When the student began to stutter as she answered the question, Gordon _____

(11) Joe feels happy when _____

_____

(12) George wanted to know _____

_____

(13) If Roy answered the phone and the other person started stuttering, Roy _____

_____

(14) If Jim had to choose between voting for someone who stuttered and someone who didn't, he _____

_____

(15) Larry's schoolwork _____

_____

(16) Arnie felt happy when _____

_____

(17) Steve's greatest longing _____

_____

(18) When the teacher skipped over the student because she stuttered, Tony _____

(19) Gary's best friend _____

_____

(20) When the stutterer tried out for the drama club, Jim _____

_____

(21) When Walter heard that a stutterer wanted to become a lawyer, he

_____

(22) Ben became embarrassed _____

_____

(23) Dave felt _____

_____

(24) When the saleslady began to stutter as she answered John's question about cost, he _____

_____

(25) Harry's nerves _____

_____

(26) Jack's most important decision _____

_____

(27) Mel _____

_____

(28) If Paul had to choose between doing the homework assignment with someone who stuttered or someone who didn't stutter, Paul _____

_____

(29) What pains Vin _____

_____

(30) Ken often thinks of himself as a _____

_____

(31) The reason Ralph tries to get ahead is _____

_____

(32) Ned believes most people think of him as _____

_____

(33) When a stutterer applied for membership in the Debate Club, Bill

_____

(34) When Jake had something to say and others were around, he _____

_____

(35) Like most boys, Andy sometimes thinks his friends are _____

_____

(36) If Al heard a public speaker begin to stutter, he _____

_____

(37) Most jobs with responsibility made Nick feel _____

_____

(38) From past experience, Roy felt most people were _____

_____

(39) Tim usually felt awkward when _____

_____

(40) If Dick found out that his blind date stuttered, he _____

_____

(41) What Ken's friends liked most about him was _____

_____

(42) Sometimes Eddie wishes that _____

_____

(43) Some of Keith's friends _____

_____

(44) When Eugene heard his new teacher begin to stutter, he _____

_____

(45) Sometimes Mel worries about _____

_____

(46) After Ken finished the test, he thought that he _____

_____

(47) If Mark had to choose between going to the prom with a girl who stuttered or not going to the prom, he _____

_____

(48) When Alan saw others doing better than he, Alan _____

_____

(49) Lou feels most people who meet him for the first time think he is

_____

(50) If Jim, who stuttered, had to choose between going to the discussion group and speaking, or staying home and listening to the discussion on the radio, he _____

_____

(51) Don thinks the things that make a person work hardest are _____

_____

(52) Rick sometimes thought his teacher _____

_____

(53) If Leo saw his buddy dancing with a stutterer, he _____

_____

(54) Vance often felt like _____

_____

(55) When told he would have to do the whole thing himself, Andy _____

_____

(56) When Larry saw the boy begin to stutter as he asked the girl for a date, Larry _____

_____

(57) Pete feels most people don't reach their goals because of _____

_____

(58) Jerry believes his group thinks he is _____

_____

(59) If Mort's sister decided to marry a stutterer, Mort _____

_____

(60) If Mack had any children, the one thing he would do for them is

_____

(61) When Al's father began to stutter, Al _____

_____

(62) When Nick thought the odds were against him, he _____

_____

(63) Sal would do anything in order to be _____

_____

The G. and S. Verbal Thinking Speed Test (Form I)

Name: _____ Age: _____

Sex: Male _____ Female _____ Birth Date: _____

Date: _____ Grade: _____

This is a test of how fast you can think in sentences. Complete each of the following sentences so that it makes sense. You may use either a word or a phrase, although a phrase is preferable. Since you will have only a limited amount of time, work quickly. In most cases the best way to answer the test is to put down the first thing that comes to your mind after you read the beginning of the sentence. Do not worry about the spelling but write as quickly and as legibly as you can.

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_____.

You could finish this sentence by writing: "was happy," or "wanted to score another," or "stopped playing and went home," or some other answer that makes sense.

DO NOT TURN THIS PAGE UNTIL YOU ARE TOLD TO BEGIN.

DO NOT SKIP ANY SENTENCES.

(1) The thing Mary liked to do best in her spare time was _____

_____

(2) After Florence finished talking she thought she _____

_____

(3) When a stutterer came to the party, Janice _____

_____

(4) What Dot disliked most about her work was _____

_____

(5) When Sherry asked for directions and the person began to stutter as he answered, Sherry _____

_____

(6) When Joan thought the job was too much for her, she _____

_____

(7) If Stephanie had trouble getting out a word (stuttered), Dorothy

_____

(8) When they asked Elizabeth to be in charge, she _____

_____

(9) Sometimes Jane _____

_____

(10) When the student began to stutter as he answered the question, Ruth _____

_____

(1) _____

_____

(2) _____

_____

(3) _____

_____

(4) _____

_____

(5) _____

_____

(6) _____

_____

(7) _____

_____

(8) _____

_____

(9) _____

_____

(10) _____

_____

_____

(11) Janet feels happy when _____

_____

(12) Joyce wanted to know _____

_____

(13) If Virginia answered the phone and the other person started stuttering, Virginia _____

_____

(14) If Joan had to choose between voting for someone who stuttered and someone who didn't, she _____

_____

(15) Laura's schoolwork _____

_____

(16) Irma felt happy when _____

_____

(17) Margie's greatest longing _____

_____

(18) When the teacher skipped over the student because he stuttered, Vera _____

_____

(19) Wanda's best friend _____

_____

(20) When the stutterer tried out for the drama club, Mary _____

_____

(21) When Wanda heard that a stutterer wanted to become a lawyer, she

_____

(22) Betty became embarrassed _____

_____

(23) Dianne felt _____

_____

(24) When the salesman began to stutter as he answered Mary's question about cost, she _____

_____

(25) Helen's nerves _____

_____

(26) Jane's most important decision _____

_____

(27) Elaine _____

_____

(28) If Mary had to choose between doing the homework assignment with someone who stuttered or someone who didn't, Mary _____

_____

(29) What pains Vera _____

_____

(30) Kate often thinks of herself as a _____

_____

(31) The reason Lillian tries to get ahead is _____

_____

(32) Nancy believes most people think of her as _____

_____

(33) When a stutterer applied for membership in the Debate Club, Cora

_____

(34) When Janet had something to say and others were around, she _____

_____

(35) Like most girls, Betty sometimes thinks her friends are _____

_____

(36) If Janice heard a public speaker begin to stutter, she _____

_____

(37) Most jobs with responsibility made Nora feel _____

_____

(38) From past experience, Rachel felt most people were _____

_____

(39) Tina usually felt awkward when _____

_____

(30) Kate often thinks of herself as a _____

_____

(31) The reason Lillian tries to get ahead is _____

_____

(32) Nancy believes most people think of her as _____

_____

(33) When a stutterer applied for membership in the Debate Club, Cecil _____

_____

(34) When Janet had something to say and others were around, she _____

_____

(35) Like most girls, Betty sometimes thinks her friends are _____

_____

(36) If Janice heard a public speaker begin to stutter, she _____

_____

(37) Most jobs with responsibility made Nora feel _____

_____

(38) From past experience, Rachel felt most people were _____

_____

(39) Tina usually felt ashamed when _____

_____

(40) If Paula found out that her blind date stuttered, she _____

_____

(41) What Stephanie's friends liked most about her was _____

_____

(42) Sometimes Elaine wishes that _____

_____

(43) Some of Evelyn's friends _____

_____

(44) When Amy heard her new teacher begin to stutter, she _____

_____

(45) Sometimes Mabel worries about _____

_____

(46) After Madeline finished the test, she thought that she _____

_____

(47) If Helen had to choose between going to the prom with a boy who stuttered or not going to the prom, she _____

_____

(48) When Alice saw others doing better than she, Alice _____

_____

(49) Jane feels most people who meet her for the first time think she is _____

_____

(50) If Jane, who stuttered, had to choose between going to the discussion group and speaking, or staying home and listening to the discussion on the radio, she _____

_____

(51) Betty thinks the things that make a person work hardest are _____

_____

(52) Lois sometimes thought her teacher _____

_____

(53) If Mary saw her girl friend dancing with a stutterer, she _____

_____

(54) Edith often felt like _____

_____

(55) When told she would have to do the whole thing herself, Annette __

_____

(56) When Clara saw the boy begin to stutter as he asked the girl for a date, Clara _____

_____

(57) Peggy feels most people don't reach their goals because of _____

_____

(58) Joan believes her group thinks she is _____

_____

(59) If Sara's brother decided to marry a stutterer, Sara _____

_____

(60) If Marge had any children, the one thing she would do for them is

_____

(61) When Irene's mother began to stutter, Irene _____

_____

(62) When Nan thought the odds were against her, she _____

_____

(63) Dot would do anything in order to be _____

_____

APPENDIX F

QUESTIONNAIRES EMPLOYED IN MAIN INVESTIGATION

("G. and S. Verbal Intelligence Speed Test" for Males and Females)

("Personal and Social Attitudes Test" for Males and Females)

The G. and S. Verbal Intelligence Speed Test (Form I)

Name: _____ Age: _____

Sex: Male _____ Female _____ Birth Date: _____

Date: _____ Class: _____

Course: _____

This is a test of how fast you can think in sentences. Complete each of the following sentences so that it makes sense. You may use either a word or a phrase, although a phrase is preferable. In most cases the best way to answer the test is to put down the first thing that comes to your mind after you read the beginning of the sentence. Do not worry about the spelling but write as quickly and as legibly as you can.

Example: When Al scored the goal, he _____

_____.

You could finish this sentence by writing: "was happy," or "wanted to score another," or "stopped playing and went home," or some other answer that makes sense.

DO NOT TURN THIS PAGE UNTIL YOU ARE TOLD TO BEGIN.

DO NOT SKIP ANY SENTENCES.

(1) Most jobs with responsibility made Ed feel _____

_____

(2) When Frank thought the job was too much for him, he _____

_____

(3) The thing Tim liked to do in his spare time was _____

_____

(4) If Dick heard that a cerebral palsied student wanted to come into his class, he _____

_____

(5) When Burt had something to say and others were around, he _____

_____

(6) When Jack saw Negroes moving in next door, he _____

_____

(7) As between Mother's and Father's ways, Mel usually chose _____

_____

(8) When Mike heard that a blind person wanted to come to his school, he _____

(9) When they put a Negro foreman over him, Clint _____

_____

(10) When the teacher told the class that they had to stay after school, Vic _____

(11) When a stutterer came to the party, Joe _____

_____

(12) If George had to choose between going to a school that had blind students in it, or one that didn't have blind students, he _____

_____

(13) When Ken saw others doing better than he, Ken _____

_____

(14) When Harold had his choice of going on the field trip with a male leader or a female leader, he _____

_____

(15) When Larry discovered the school he was planning to enter was half Negro, he _____

_____

(16) If a blind person was introduced to Arnie, he _____

_____

(17) Steve felt happy when _____

_____

(18) If Hank heard a public speaker begin to stutter, he _____

_____

(19) When Gary saw his younger brother dancing with a Negro, he _____

_____

(20) When told he would have to do the whole thing by himself, Lou _____

_____

(21) When Roger told Don that he thought cerebral palsied students should go to their own school, Don _____

_____

(22) When Ben heard his new teacher begin to stutter, he _____

_____

(23) When Dave heard that he had to speak in front of the class, he thought _____

_____

(24) If they put a blind person to work next to Tony, he _____

_____

(25) If Harry found out that his blind date stuttered, he _____

_____

(26) When Roger saw the doctor they were trying to give him was a Negro, he _____

_____

(27) When Bruno had to choose between a cerebral palsied job applicant and one that wasn't cerebral palsied, he _____

_____

(28) When Mitch thought the odds were against him, he _____

_____

(29) From past experience, no matter what others thought, Vin himself knew that he _____

_____

(30) When Henry saw a blind student in his class, he _____

_____

(31) When a stutterer tried out for the drama club, Ralph _____

_____

(32) The reason Ned tries to get ahead is _____

_____

(33) When his favorite barbershop began being used by Negroes, Ted ____

_____

(34) Working with others all the time made Jake _____

_____

(35) When a cerebral palsied student called Andy up for help with the homework, Andy _____

_____

(36) When the saleslady began to stutter as she answered Barney's question about cost, Barney _____

_____

(37) If Nick had to choose between voting for someone who stuttered or someone who didn't, he _____

_____

(38) From past experience, Ray felt most people were _____

_____

(39) When Charlie heard that a cerebral palsied person wanted to join his club, he _____

_____

(40) When Jerry heard that a blind person had applied for membership in the swimming club, he _____

_____

(41) When Fred thinks the homework is too hard for him, he _____

_____

(42) Every time they didn't invite Eddie to the party, he _____

_____

(43) When Negroes began being admitted to the club, Keith decided _____

_____

(44) If the boss began hiring cerebral palsied workers where Bruce worked, Bruce _____

_____

(45) When Albert heard that his friend had stopped going out with the blind girl, he _____

_____

(46) When a stutterer applied for membership in the debate club, Leo __

_____

(47) If Jay found out that a cerebral palsied student was applying to the same school as he was, he _____

_____

(48) When the boss began hiring many Negroes, Alan _____

_____

(49) Angelo feels most people who meet him for the first time think he is _____

(50) When Sam saw the teacher he was getting was blind, he _____

_____

(51) When they put a Negro to work next to him, Dan _____

_____

(52) Rich sometimes thought his teacher _____

_____

(53) If Kurt had to choose between doing the homework assignment with someone who stuttered, or someone who didn't, he _____

_____

(54) If Vance found out that a cerebral palsied person had applied for the same job that he wanted, he _____

_____

(55) When Carl saw a Negro and a white involved in an accident, he naturally blamed the _____

_____

(56) In ten years Howard thought he would be _____

_____

(57) If Pete's sister decided to marry a stutterer, Pete _____

_____

(58) When a blind student called Edward up for help with the homework, Edward _____

_____

(59) Every once in a while, Wayne believes his group thinks he is _____

_____

(60) When Mack heard that a cerebral palsied student was trying out for the modern dance club, he _____

_____

(61) Alex sometimes thought _____

_____

(62) If Norman's sister decided to marry a blind boy, Norman _____

_____

(63) If Sal saw a cerebral palsied person drool while she was talking, he _____

The G. and S. Verbal Intelligence Speed Test (Form I)

Name: _____ Age: _____

Sex: Male _____ Female _____ Birth Date: _____

Date: _____ Class: _____

Course: _____

This is a test of how fast you can think in sentences. Complete each of the following sentences so that it makes sense. You may use either a word or a phrase, although a phrase is preferable. In most cases the best way to answer the test is to put down the first thing that comes to your mind after you read the beginning of the sentence. Do not worry about the spelling but write as quickly and as legibly as you can.

Example: When Al scored the goal, he _____

_____.

You could finish this sentence by writing: "was happy," or "wanted to score another," or "stopped playing and went home," or some other answer that makes sense.

DO NOT TURN THIS PAGE UNTIL YOU ARE TOLD TO BEGIN.

DO NOT SKIP ANY SENTENCES.

(1) Most jobs with responsibility made Elizabeth feel _____

_____

(2) When Florence thought the job was too much for her, she _____

_____

(3) The thing Carol liked to do in her spare time was _____

_____

(4) If Dot heard that a cerebral palsied student wanted to come into her class, she _____

_____

(5) When Nora had something to say and others were around, she _____

_____

(6) When Joan saw Negroes moving in next door, she _____

_____

(7) As between Mother's and Father's ways, Gloria usually chose _____

_____

(8) When Mary heard that a blind person wanted to come to her school, she _____

(9) When they put a Negro forelady over her, Jane _____

_____

(10) When the teacher told the class that they had to stay after school, Julia _____

_____

(11) When a stutterer came to the party, Janet _____

_____

(12) If Joyce had to choose between going to a school that had blind students in it, or one that didn't have blind students, she _____

_____

(13) When Myrna saw others doing better than she, Myrna _____

_____

(14) When Louise had her choice of going on the field trip with a male leader or a female leader, she _____

_____

(15) When Laura discovered the school she was planning to enter was half Negro, she _____

_____

(16) If a blind person was introduced to Irma, she _____

_____

(17) Margie felt happy when _____

_____

(18) If Donna heard a public speaker begin to stutter, she _____

_____

(19) When Wanda saw her younger sister dancing with a Negro, she _____

_____

(20) When told she would have to do the whole thing by herself, Madeline _____

_____

(21) When Gloria told Maureen that she thought cerebral palsied students should go to their own school, Maureen _____

_____

(22) When Betty heard her new teacher begin to stutter, she _____

_____

(23) When Dianne heard that she had to speak in front of the class, she thought _____

_____

(24) If they put a blind person to work next to Charlotte, she _____

_____

(25) If Helen found out that her blind date stuttered, she _____

_____

(26) When Arlene saw the doctor they were trying to give her was a Negro, she _____

_____

(27) When Elaine had to choose between a cerebral palsied job applicant and one that wasn't cerebral palsied, she _____

_____

(28) When Tanya thought the odds were against her, she _____

_____

(29) From past experience, no matter what others thought, Vera herself knew that she _____

_____

(30) When Kate saw a blind student in her class, she _____

_____

(31) When a stutterer tried out for the drama club, Lillian _____

_____

(32) The reason Nancy tries to get ahead is _____

_____

(33) When her favorite beauty shop began being used by Negroes, Barbara

_____

(34) Working with others all the time made Kim _____

_____

(35) When a cerebral palsied student called Marion up for help with the homework, Marion _____

_____

(36) When the salesman began to stutter as he answered Sandra's question about cost, Sandra _____

_____

(37) If Jayne had to choose between voting for someone who stuttered or someone who didn't, she _____

_____

(38) From past experience, Rachel felt most people were _____

_____

(39) When Tina heard that a cerebral palsied person wanted to join her club, she _____

_____

(40) When Connie heard that a blind person had applied for membership in the swimming club, she _____

_____

(41) When Stephanie thinks the homework is too hard for her, she _____

_____

(42) Every time they didn't invite Angela to the party, she _____

_____

(43) When Negroes began being admitted to the club, Evelyn decided ____

_____

(44) If the boss began hiring cerebral palsied workers where Marisue worked, Marisue _____

_____

(45) When Mabel heard that her friend had stopped going out with the blind boy, she _____

(46) When a stutterer applied for membership in the debate club, Phyllis _____

_____

(47) If Rosalie found out that a cerebral palsied student was applying to the same school as she was, she _____

_____

(48) When the boss began hiring many Negroes, Alice _____

_____

(49) Shirley feels most people who meet her for the first time think she is _____

(50) When Marilyn saw the teacher she was getting was blind, she _____

_____

(51) When they put a Negro to work next to her, Elka _____

_____

(52) Lois sometimes thought her teacher _____

_____

(53) If Neysa had to choose between doing the homework assignment with someone who stuttered or someone who didn't, she _____

_____

(54) If Edith found out that a cerebral palsied person had applied for the same job that she wanted, she _____

_____

(55) When Annette saw a Negro and white involved in an accident, she naturally blamed the _____

_____

(56) In ten years Kathy thought she would be _____

_____

(57) If Peggy's brother decided to marry a stutterer, Peggy _____

_____

(58) When a blind student called Penny up for help with the homework, Penny _____

(59) Every once in a while, Eunice believes her group thinks she is ___

_____

(60) When Dale heard that a cerebral palsied student was trying out for the modern dance club, she _____

_____

(61) Agnes sometimes thought _____

_____

(62) If Georgia's brother decided to marry a blind girl, Georgia _____

_____

(63) If Viola saw a cerebral palsied person drool while he was talking, she _____

_____

The Personal and Social Attitudes Records

(For the use of schools, colleges, and records office)

Name: _____ Age: _____

Sex: Male _____ Female _____ Birth Date: _____

Date: _____ Class: _____

Course Title: _____ Major: _____

Occupation (If student, leave blank): _____

Occupation of Parents: _____

The office would like to have in its files a record of your personal and social attitudes--that is, your attitudes toward politics, responsibility, parents, physical handicaps, race prejudice, etc. Complete each of the statements by writing in what best applies in your case. Consider each statement carefully. There is no time limit. What you write in will represent the record of your personal and social attitudes.

DO NOT SKIP ANY SENTENCES.

(1) Most jobs with responsibility make me feel _____

_____

(2) When I think the job is too much for me, I _____

_____

(3) The thing I like to do in my spare time is _____

_____

(4) If I heard that a cerebral palsied student wanted to come into my class, I _____

_____

(5) When I have something to say and others are around, I _____

_____

(6) When I saw Negroes moving in next door, I _____

_____

(7) As between Mother's and Father's ways, I choose (circle one): (a) practically always Mother's; (b) usually Mother's, although sometimes Father's; (c) practically always Father's; (d) usually Father's, although sometimes Mother's.

(8) When I heard that a blind person wanted to come to my school, I __

_____

(9) When they put a Negro foreman over me, I _____

_____

(10) When the teacher told the class that they had to stay after school, I _____

_____

(11) When a stutterer came to the party, I _____

_____

(12) If I had to choose between going to a school that had blind students in it, or one that didn't have blind students, I _____

_____

(13) When I see others doing better than I _____

_____

(14) When I had my choice of going on the field trip with a male leader or a female leader, I _____

_____

(15) When I discovered the school I was planning to enter was half Negro, I _____

_____

(16) If a blind person was introduced to me, I _____

_____

(17) I feel happy when _____

_____

(18) If I heard a public speaker begin to stutter, I _____

_____

(19) When I saw my younger brother dancing with a Negro, I--(if you don't have a younger brother, answer as if you did) _____

_____

(20) When I am told I have to do the whole thing by myself, I _____

_____

(21) When someone told me that cerebral palsied students should go to their own school, I _____

_____

(22) When I heard my new teacher begin to stutter, I _____

_____

(23) When I heard that I had to speak in front of the class, I thought

_____

(24) If they put a blind person to work next to me, I _____

_____

(25) If I found out that my blind date stuttered, I _____

_____

(26) When I saw the doctor they were trying to give me was a Negro, I

_____

(27) When I had to choose between a cerebral palsied job applicant and one that wasn't cerebral palsied, I _____

_____

(28) When I think the odds are against me, I _____

_____

(29) From past experience, no matter what others think, I myself know that I _____

(30) When I saw a blind student in my class, I _____

_____

(31) When a stutterer tried out for the drama club, I _____

_____

(32) The reason I try to get ahead is _____

_____

(33) When my favorite barber shop began being used by Negroes, I _____

_____

(34) Working with other all the time makes me _____

_____

(35) When a cerebral palsied student called me up for help with the homework, I _____

_____

(36) When the saleslady began to stutter as she answered my question about cost, I _____

_____

(37) If I had to choose between voting for someone who stuttered or someone who didn't, I _____

(38) From past experience, I feel most people are _____

_____

(39) When I heard that a cerebral palsied person wanted to join my club, I _____

_____

(40) When I heard that a blind person had applied for membership in the swimming club, I _____

_____

(41) When I think the homework is too hard for me, I _____

_____

(42) Every time they don't invite me to the party, I _____

_____

(43) When Negroes began being admitted to the club, I decided _____

_____

(44) If the boss began hiring cerebral palsied workers where I worked, I _____

(45) When I heard that my friend had stopped going out with the blind girl, I _____

(46) When a stutterer applied for membership in the debate club, I ____

_____

(47) If I found out that a cerebral palsied student was applying to the same school as I was, I _____

_____

(48) When the boss began hiring many Negroes, I _____

_____

(49) I feel most people who meet me for the first time think I am _____

_____

(50) When I saw the teacher I was getting was blind, I _____

_____

(51) When they put a Negro to work next to me, I _____

_____

(52) I sometimes think my teacher is _____

_____

(53) If I had to choose between doing the homework assignment with someone who stuttered, or someone who didn't, I _____

_____

(54) If I found out that a cerebral palsied person had applied for the same job that I wanted, I _____

_____

(55) When I see a Negro and a white involved in an accident, I naturally blame the _____

_____

(56) In ten years I think I will be _____

_____

(57) If my sister decided to marry a stutterer, I--(If you don't have a sister, answer as if you did) _____

_____

(58) When a blind student called me up for help with the homework, I

_____

(59) Every once in a while, I believe my group thinks I am _____

_____

(60) When I heard that a cerebral palsied student was trying out for the modern dance club, I _____

_____

(61) I sometimes thought _____

_____

(62) If my sister decided to marry a blind boy, I--(If you don't have a sister, answer as if you did) _____

_____

(63) If I saw a cerebral palsied person drool while she was talking, I

_____

The Personal and Social Attitudes Records

(For the use of schools, colleges, and records office)

Name: _____ Age: _____

Sex: Male _____ Female _____ Birth Date: _____

Date: _____ Class: _____

Course Title: _____ Major: _____

Occupation (If student, leave blank): _____

Occupation of Parents: _____

The office would like to have in its files a record of your personal and social attitudes--that is, your attitudes toward politics, responsibility, parents, physical handicaps, race prejudice, etc. Complete each of the statements by writing in what best applies in your case. Consider each statement carefully. There is no time limit. What you write in will represent the record of your personal and social attitudes.

DO NOT SKIP ANY SENTENCES.

(1) Most jobs with responsibility make me feel _____

_____

(2) When I think the job is too much for me, I _____

_____

(3) The thing I like to do in my spare time is _____

_____

(4) If I heard that a cerebral palsied student wanted to come into my class, I _____

_____

(5) When I have something to say and others are around, I _____

_____

(6) When I saw Negroes moving in next door, I _____

_____

(7) As between Mother's and Father's ways, I choose (circle one): (a) practically always Mother's; (b) usually Mother's although sometimes Father's; (c) practically always Father's; (d) usually Father's, although sometimes Mother's.

(8) When I heard that a blind person wanted to come to my school, I

_____

(9) When they put a Negro forelady over me, I _____

_____

(10) When the teacher told the class that they had to stay after school, I _____

_____

(11) When a stutterer came to the party, I _____

_____

(12) If I had to choose between going to a school that had blind students in it, or one that didn't have blind students, I _____

_____

(13) When I see others doing better than I _____

_____

(14) When I had my choice of going on the field trip with a male leader or a female leader, I _____

_____

(15) When I discovered the school I was planning to enter was half Negro, I _____

_____

(16) If a blind person was introduced to me, I _____

_____

(17) I feel happy when _____

_____

(18) If I heard a public speaker begin to stutter, I _____

_____

(19) When I saw my younger sister dancing with a Negro, I--(If you don't have a younger sister, answer as if you did) _____

_____

(20) When I am told I have to do the whole thing by myself, I _____

_____

(21) When someone told me that cerebral palsied students should go to their own school, I _____

_____

(22) When I heard my new teacher begin to stutter, I _____

_____

(23) When I heard that I had to speak in front of the class, I thought

_____

(24) If they put a blind person to work next to me, I _____

_____

(25) If I found out that my blind date stuttered, I _____

_____

(26) When I saw the doctor they were trying to give me was a Negro, I

_____

(27) When I had to choose between a cerebral palsied job applicant and one that wasn't cerebral palsied, I _____

_____

(28) When I think the odds are against me, I _____

_____

(29) From past experience, no matter what others think, I myself know that I _____

(30) When I saw a blind student in my class, I _____

_____

(31) When a stutterer tried out for the drama club, I _____

_____

(32) The reason I try to get ahead is _____

_____

(33) When my favorite beauty shop began being used by Negroes, I _____

_____

(34) Working with others all the time makes me _____

_____

(35) When a cerebral palsied student called me up for help with the homework, I _____

_____

(36) When the salesman began to stutter as he answered my question about cost, I _____

_____

(37) If I had to choose between voting for someone who stuttered or someone who didn't, I _____

_____

(38) From past experience, I feel most people are _____

_____

(39) When I heard that a cerebral palsied person wanted to join my club, I _____

(40) When I heard that a blind person had applied for membership in the swimming club, I _____

_____

(41) When I think the homework is too hard for me, I _____

_____

(42) Every time they don't invite me to the party, I _____

_____

(43) When Negroes began being admitted to the club, I decided _____

_____

(44) If the boss began hiring cerebral palsied workers where I worked, I _____

(45) When I heard that my friend had stopped going out with the blind boy, I _____

_____

(46) When a stutterer applied for membership in the debate club, I ____

_____

(47) If I found out that a cerebral palsied student was applying to the same school as I was, I _____

_____

(48) When the boss began hiring many Negroes, I _____

_____

(49) I feel most people who meet me for the first time think I am _____

_____

(50) When I saw the teacher I was getting was blind, I _____

_____

(51) When they put a Negro to work next to me, I _____

_____

(52) I sometimes think my teacher is _____

_____

(53) If I had to choose between doing the homework assignment with someone who stuttered, or someone who didn't, I _____

_____

(54) If I found out that a cerebral palsied person had applied for the same job that I wanted, I _____

_____

(55) When I saw a Negro and a white involved in an accident, I naturally blame the _____

_____

(56) In ten years I think I will be _____

_____

(57) If my brother decided to marry a stutterer, I--(If you don't have a brother, answer as if you did) _____

_____

(58) When a blind student called me up for help with the homework, I

_____

(59) Every once in a while, I believe my group thinks I am _____

_____

(60) When I heard that a cerebral palsied student was trying out for the modern dance club, I _____

_____

(61) I sometimes thought _____

_____

(62) If my brother decided to marry a blind girl, I--(If you don't have a brother, answer as if you did) _____

_____

(63) If I saw a cerebral palsied person drool while he was talking, I

_____

BF698 Alexanian, Alexander. c.2
A1 27 AN INVESTIGATION INTO PUBLIC & PRIVATE ATTITUDES HELD TOWARD VARIOUS HANDICAPPED GROUPS...

Date Due (1967)			
5-17-76			
9/6/76			

BF698 c.2
A1 27
Alexanian, Alexander
AN INVESTIGATION INTO PUBLIC AND PRIVATE ATTITUDES HELD TOWARD VARIOUS HANDICAPPED GROUPS: STUTTERERS, CEREBRAL PALSIED...

DATE	ISSUED TO (1967)
5-17-76	P. Friedmann
9/6/76	C. Hungate
11-24-76	Robert Pollock

AMERICAN FOUNDATION FOR THE BLIND
15 WEST 16th STREET
NEW YORK, N. Y. 10011